GenCore version 5.1.6
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Database
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Maximum Match 100%
Listing first 45 summaries
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A Geneseq_23Sep04:*
1: geneseqp1980s:*
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                                                                                                                                                                                                                                                                                                           2002273 seqs, 358729299 residues
                                                                                                                                                                                                                                                                                                                                         BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                         US-10-657-404A-1
63
                                                                                                                                                                                                                                                                                                                                                                                          KAEYKKNKHRH 11
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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| 50 | 52 | 52 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 63 | Score |
| | 82.5 | | | | | | | | | | | | | | | | | | | 95.2 | 95.2 | 95.2 | 95.2 | 100.0 | Query |
| 23 | 18 | 14 | 4590 | 4563 | 4563 | 4563 | 4563 | 4563 | 4563 | 4563 | 4563 | 4561 | 4560 | 4536 | 4536 | 3923 | 2463 | 394 | 138 | 50 | 24 | 20 | 16 | 11 | Length |
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| ABR57177 | AAW96891 | AAW41258 | AAU33184 | ADO33447 | AD033445 | ADH18870 | ADH18871 | ADF43408 | ABU79140 | ABR40253 | AA015893 | ADD48677 | AAU98981 | AAW96826 | AAW41262 | AAY31237 | ADJ57400 | AAW96831 | AAW41259 | AAW96844 | AAE14545 | AAE14542 | ABJ37574 | AAW57204 | ID |
| Abr57177 Human PDG | Aaw96891 ApoB-100 | Aaw41258 Anti-coag | Aau33184 Novel hum | Ado33447 Human apo | Ado33445 Human apo |) Human | | Adf43408 Apolipopr | 0 | Abr40253 Human ali | Aao15893 Human apo | Add48677 Human Pro | Aau98981 Human apo | Aaw96826 Amino aci | Apoli | Aay31237 Human Apo | Adj57400 Human apo | Aaw96831 Nucleic a | Aaw41259 Apolipopr | Aaw96844 Nucleic a | Aae14545 Human apo | •• | Abj37574 Heparin b | Aaw57204 Apo B bin | Description |

| 45 | 44 | 43 | 42 | 41 | 40 | 39 | 3 8 | 37 | 36 | 35 | 34 | y y | 32 | 31 | 30 | 29 | 28 | 27 | |
|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|---|
| 39 | 39 | 39 | 39 | 39 | 39 | 40 | 40 | 40 | 40 | 41 | 41 | 41 | 41.5 | 41.5 | 41.5 | 47 | 47 | 47 | |
| 61.9 | 61.9 | 61.9 | 61.9 | 61.9 | 61.9 | 63.5 | 63.5 | 63.5 | 63.5 | 65.1 | 65.1 | 65.1 | 65.9 | 65.9 | 65.9 | 74.6 | 74.6 | | |
| 628 | 328 | 261 | 196 | 79 | 10 | 769 | 79 | 59 | 39 | 1219 | 1213 | 1213 | 660 | 596 | 577 | 43 | 20 | 20 | |
| 4 | σ | σ | σ | 4. | 4. | ω | ω | 4 | 4 | Α, | N | N | ω | w | ω | N | œ | 8 | |
| ABG18881 | ABP79068 | ADA21104 | ABP60674 | AAE06244 | AAG94651 | ADI81620 | ADP71384 | AAE06243 | AAE06242 | ABB62618 | AAW25029 | AAW06086 | AAG48995 | AAG48996 | AAG48997 | AAW96874 | ADM98185 | ADN00545 | |
| | Abp79068 | Ada21104 | Abp60674 | Aae06244 | Aag94651 | Adi81620 | Adp71384 | Aae06243 | Aae06242 | Abb62618 | Aaw25029 | Aaw06086 | Aag48995 | Aag48996 | Aag48997 | Aaw96874 | Adm98185 | Adn00545 | |
| Novel hum | N. gonorr | Human sec | Translati | H-K4b pol | Human com | C. elegan | Polymer o | H-K3b pol | H-K2b pol | Drosophil | TATA-bind | Drosophil | Arabidops | Arabidops | Arabidops | Nucleic a | Apolipopr | Apolipopr | • |

ALIGNMENTS

AAW57204; AAW57204 standard; peptide; 11 ₿

03-AUG-1998 (first entry) Apo B binding site peptide

Apo B; binding site; receptor; cancer; drug delivery; anticancer; growth supplement; non-natural lipid particle; low density lipoprotein; LDL; receptor component; apo B100 receptor site.

Synthetic.

WO9813385-A2.

02-APR-1998

25-SEP-1997; 97WO-GB002610

27-SEP-1996; 96GB-00020153

(UYST) UNIV STRATHCLYDE.

Halbert GW, Owens MD, Baillie 9

WPI; 1998-230637/20.

Non-natural lipid particle comprising peptide binding to apo B protein receptor - useful as, e.g. vector for delivering drugs to cancer cells that express this receptor.

Claim 12; Page 52; 73pp; English.

RESULT 1
AAWS7204
ID AAWS7204
AC AAWS7204 The present sequence represents a specifically claimed Apo B binding site peptide which can be used as a component of a non-naturally occurring, receptor-competent low density lipoprotein (LDL) particle of the present invention. The LDL particle comprises at least 1 peptide component that has at least 1 binding site for an apo B protein receptor and at least 1 lipophilic substituent. Also described in the invention are peptides containing an apo B binding sequence with at least 70% identity with sequences: KAEYKKNKHRH (1) or TTRLTRKRGLK (2), or their dimers. Non-naturally occurring, receptor-competent LDL particles are useful as: (i) drug-targeting vectors for delivering anticancer drugs to cancer cells that express an apo B protein receptor, and (ii) additives for cell culture media especially as growth supplements. Non-naturally occurring,

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Query Match Best Local S

Sequence 11 AA;

receptor-competent LDL particles do not require the complete apo B affinity to an apo B protein receptor

Matches

100.0%; Score 63; DB 2; I 100.0%; Pred. No. 0.00015; tive 0; Mismatches 0;

Length 11; Indels

۰, Gaps

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RESULT 2 ABJ37574

Heparin binding peptide sequence #27.

10-MAY-2003 (first entry)

ABJ37574 standard; peptide; 16

ABJ37574;

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1 KAEYKKNKHRH 11 1 KAEYKKNKHRH 11 l Similarity 100.

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RESULT 3
AAE14542
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                                                  δ
                                                                        Query Match
Best Local S
                                                                   Matches
                                                                                            The invention relates to a novel ligand for binding a target biomolecule, which comprises a peptide having at least one sulphated or sulphonated charged and at least one amino acid and at least one amino acid chosen from neutral and positively e.g. tumours, rheumatoid arthritis, diabetic retinopathy and hypoxia. This sequence represents a heparin binding peptide relating to the
                                                                                                                                                                           Use of a ligand comprising of at least one sulfated or sulfonated amino retinopathy and hypoxia.
                                                                                                                                                                                                                                    WPI; 2003-300420/29,
                                                                                                                                                                                                                                                        Hubbell JA,
                                                                                                                                                                                                                                                                                         20-JUL-2001; 2001US-0306726P.
                                                                                                                                                                                                                                                                                                           22-JUL-2002; 2002WO-US023419.
                                                                                                                                                                                                                                                                                                                                     30-JAN-2003.
                                                                                                                                                                                                                                                                                                                                                  WO2003007689-A2.
                                                                                                                                                                                                                                                                                                                                                          Cytostatic; antirheumatic; antiarthritic; antidiabetic; ophthalmological; cardiovascular; circulatory; ligand; sulphated; sulphonated; tumour; rheumatoid arthritis; hypoxia; diabetic retinopathy; heparin.
                                4
                                                                10;
                                                                    Similarity
                                      KAEYKKNKHRH 11
                        KAQYKKNKHRH 14
                                                                                                                                                                                                                                                                       ETH ZUERICH
UNIV ZURICH
                                                         Conservative
                                                                                                                                                                                                                                          Schoenmakers R, Maynard HD;
                                                                                                                                                                                                                                                                      ZURICH.
                                                                95.2%;
                                                 Score 60; DB;
Pred. No. 0.000
1; Mismatches
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л.00078;
0;
                                                                    DB 6;
                                                           _ Length 16;
                                             Indels
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                                       Gaps
                                      0,
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The invention relates to peptides having affinity for oxidised low density lipoprotein (oxLDL), in cyclised or multimeric form. The peptide concerning the amount of antibodies in a sample, having affinity for oxLDL. The peptide contributes for oxLDL in a sample, having affinity for oxLDL. The peptide contributes for oxLDL in a sample, especially a serum or plasma sample contributes for oxLDL in a sample, especially a serum or plasma sample contributes pre-eclamating the risk of coronary heart diseases, and several other discorders such as contributed in the invention of the invention is stable, can be compared as a long half-life. The present sequence is human apoB-100 cond. And has a long half-life. The present sequence is human apoB-100 cond.
                                                                                                                                                                                                    Claim 6; Page 5; 21pp; English.
                                                                                                                                                                                                              New peptide useful in enzyme immunoassays for detecting oxidized low density lipoprotein which is a marker of coronary heart disease low ithousecular diseases, has affinity for oxidized low density
                                                                                                                                                                                                                                                                                                                              Narvanen o,
                                                                                                                                                                                                                                                                                                                                                                   18-JUL-2000; 2000GB-00017641.
                                                                                                                                                                                                                                                                                                                                            (ARKT-) ARK THERAPEUTICS LTD
                                                                                                                                                                                                                                                                                                                                                                                           18-JUL-2001; 2001WO-GB003212.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Oxidised low density lipoprotein; oxLDL; immunoassay; periaortitis; cardiovascular disease; coronary heart disease; pre-eclampsia; peptide p63.
                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO200206314-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human apoB-100 derived peptide p63.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17-MAY-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAE14542 standard; peptide; 20 AA.
                                                                                                                                                                                                                                                                                                                  Yla-Herttuala S;
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RESULT 4
AAE14545
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                                                                                                                                                                               Query Match
Best Local S
                                                                                                                                                                         Matches
Oxidised low density lipoprotein; oxLDL; immunoassay; periaortitis, cardiovascular disease; coronary heart disease, pre-eclampsia,
                                     Human apoB-100 derived peptide p244.
                                                               17-MAY-2002
                                                                                AAE14545;
                                                                                       AAE14545 standard; peptide;
                                                                                                                                                 1 KAEYKKNKHRH 11
                                                                                                                                                                  1 Similarity 95.2%;
10; Conservative
                                                                                                                                  KAQYKKNKHRH 14
                                                        (first entry)
                                                                                       24 AA.
                                                                                                                                                       Score 60; DB 5; Le
Pred. No. 0.00099;
1; Mismatches 0;
                                                                                                                                                                    Length 20;
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4

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ARESULT 5
AAW96844
ID AAW9
XX AAW9
AC AAW9
XX POT 22-A
XX POT 22-A
XX Huma
XX Huma
KW Apoll
KW nucl
KW nucl
KW non-
XX NOS Homo
XX WO98
PN WO98
XX NOS 17-E
XX NOS 17-E
XX NOS 17-E
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                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local S
Matches 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention relates to peptides having affinity for oxidised low density lipoprotein (oxLDL), in cyclised or multimeric form. The peptide is useful in an immunoassay to determine the presence, and optionally, the amount of antibodies in a sample, having affinity for oxLDL. Preferably immobilised peptide is useful for measuring the amount of autoantibodies for oxLDL in a sample, especially a serum or plasma sample from a patient for evaluating the risk of coronary heart diseases, other cardiovascular diseases, and several other disorders such as periaorritis, pre-eclampsia, non-insulin-dependent diabetes and endothelial dysfunction. The peptide of the invention is stable, can be synthesised easily without the need to isolate proteins from a patient's blood, and has a long half-life. The present sequence is human apoB-100 derived peptide p244 used in the invention
                                                                                                                          Human apolipoprotein B-100; apoB-100; very-low density lipoprotein; Wa apolipoprotein; binding; in vivo transport; nucleic acid; binding dom nuclear localisation sequence; gene therapy; cancer; cystic fibrosis; non-small cell lung carcinoma; diabetes; arteriosclerosis.
                                                                                                                                                                                                        Nucleic acid binding domain from apoB-100.
                                                                                                                                                                                                                                                                           AAW96844;
                                                                                                                                                                                                                                                                                                        AAW96844 standard; peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New peptide useful in enzyme immunoassays for detecting oxidized density lipoprotein which is a marker of coronary heart disease a cardiovascular diseases, has affinity for oxidized low density
10-JUN-1998;
                               17-DEC-1998.
                                                               WO9856938-A1
                                                                                            Homo sapiens
                                                                                                                                                                                                                                          22-APR-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 24 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 7; Page 21; 21pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2002-179777/23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Narvanen O,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18-JUL-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         18-JUL-2001; 2001WO-GB003212.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         24-JAN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO200206314-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (ARKT-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   non-insulin-dependent diabetes; endothelial dysfunction; human; apoB-100;
                                                                                                                                                                                                                                                                                                                                                                                                                1 KAEYKKNKHRH 11
                                                                                                                                                                                                                                                                                                                                                                                      σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                   10; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                     KAQYKKNKHRH 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Yla-Herttuala S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2000GB-00017641
                                                                                                                                                                                                                                          (first entry)
 98WO-US011927.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                95.2%;
                                                                                                                                                                                                                                                                                                         50
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Pred. No. 0.00
1; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.0012;
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Matches 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAW96827-77 represent nucleic acid binding domains derived from human apolipoprotein B-100 (apoB-100). ApoB-100 is a major apoprotein component of very-low density lipoproteins (VLDL), intermediate density lipoprotein (IDL), low density lipoproteins (VLDL) and lipoprotein a. The present sequence can be used in the composition of the invention. The specification describes a composition that comprises LDL and apolipoproteins for the binding and in vivo transport of nucleic acids. The composition is used to deliver nucleic acids to eukaryotic cells, in vivo or in vitro, for expressing a therapeutc polypeptide or antisense molecule (or ribozyme). Specifically they are used for gene therapy of cancers (particularly non-small cell lung carcinoma), diabetes, cystic fibrosis and arteriosclerosis
                                                                                                                                                                                                                                                   Anti-coagulant; apolipoprotein B-100; apoB-100; metastatic spread; thromboplastin-mediated process; cancer; inhibitor; blood coagulation; anglogenesis; cellular differentiation; apoptosis; KRAD-14; prothrombinase complex.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                      09-MAY-1996;
                                                                                                                               09-MAY-1997;
                                                                                                                                                          20-NOV-1997
                                                                                                                                                                                   WO9743311-A1
                                                                                                                                                                                                               Homo
                                                                                                                                                                                                                           Synthetic
                                                                                                                                                                                                                                                                                                                    Apolipoprotein B-100
                                                                                                                                                                                                                                                                                                                                              19-MAY-1998
                                                                                                                                                                                                                                                                                                                                                                          AAW41259;
                                                                                                                                                                                                                                                                                                                                                                                                  AAW41259 standard; peptide; 138 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 16; Page 150-151; 293pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Composition comprising nucleic acid bound used for delivering nucleic acid to cells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          13-JUN-1997;
14-MAY-1998;
                                                                            (UNLO ) ROYAL FREE HOSPITAL SCHOOL MED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1999-070331/06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (BAYU ) BAYLOR COLLEGE MEDICINE
                                                                                                                                                                                                             sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            KAEYKKNKHRH 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           50 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     KAQYKKNKHRH 12
                                                  3
                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Hoogeveen
                                                                                                      96GB-00009702
                                                                                                                               97WO-GB001255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        97US-00874807.
98US-00079030.
                                                  Ettelaie
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    95.2%;
                                                                                                                                                                                                                                                                                                                   fragment.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Moore JP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 60; DB 2;
Pred. No. 0.0026;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   to LDL or VLDL lipoprotein - for gene therapy and antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
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Peptide fragments of apo:lipo:protein B-100 with anticoagulant activity

WPI; 1998-008798/01.

Claim

60pp; English.

for treating or prev differentiation and

preventing coagulation, inhibiting angiogenesis, and apoptosis.

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RESULT 7
AAW9631
ID AAW9631
XX AAW9
XX AAW9
XX AAW9
XX Huma:
KW Huma:
KW Huma:
KW Apol
XX Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
AAW96827-77 represent nucleic acid binding domains derived from human
                                                                                                  Claim 16; Page 144-145; 293pp;
                                                                                                                                          Composition comprising nucleic acid bound to LDL or VLDL lipoprotein -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          13-JUN-1997;
14-MAY-1998;
                                                                                                                                                                                                                                                                                                   WPI; 1999-070331/06
                                                                                                                                                                                                                                                                                                                                                                                                         (BAYU ) BAYLOR COLLEGE MEDICINE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  10-JUN-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17-DEC-1998.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human apolipoprotein B-100; apoB-100; very-low density lipoprotein; VLDL; apolipoprotein; binding; in vivo transport; nucleic acid; binding domain; nuclear localisation sequence; gene therapy; cancer; cystic fibrosis; non-small cell lung carcinoma; diabetes; arteriosclerosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            W09856938-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Nucleic acid binding domain from apoB-100, residues 2930-3324.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 22-APR-1999
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                                                                                                                                                                                                                                                                                                                                                                       JG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 48
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                                                                                                                                                                                                                                                                                                                                                         Hoogeveen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
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98US-00079030.
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                                                                                                                                                                                                                                                                                                                                                         RC,
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                                                                                                                                                                                                                                                                                                                                               Moore JP;
                                                                                              English.
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CC The present sequence is that of human apolipoprotein B. This non-cell CC associated protein is one of a set of proteins characterised as CC diagnostic targets for hepatocellular carcinoma (HCC). Such proteins are tumour samples for hepaticist cylus (HCV) infected parients with HCC as certain specifically up-regulated in HCC tumour tissue when compared to HCC cas frected cirrhotic non-tumour tissue and normal liver. The invention CC relates to the detection of HCC by assaying patient samples such as CC related proteins. A finding of elevated levels of one or more of these can scanning methods that employ non-cell-associated and cell-associated CC related proteins. A finding of elevated levels of one or more of these cand scanning methods that employ non-cell-associated and cell-associated CC related proteins.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 8
ADJ57400
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                                                                                                                                                                                                                                                 Detecting hepatocellular carcinoma (HCC) in mammals comprises obtaining and assaying a biological sample to quantify a cell-associated or a non-cell-associated HCC-related protein and comparing the quantity to a control level.
                                                                                                                                                                                                                             Disclosure; SEQ ID NO 4; 48pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
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Best Local :
                                                                                                                                                                                                                                                                                                                                           WPI; 2004-142977/14.
GENBANK; NP_000375.
                                                                                                                                                                                                                                                                                                                                                                                           Katze M,
                                                                                                                                                                                                                                                                                                                                                                                                                                        03-JUL-2002; 2002US-0393982P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   03-JUL-2003; 2003WO-US020841.
                                                                                                                                                                                                                                                                                                                                                                                                                        (ILLU-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        15-JAN-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Hepatocellular carcinoma; marker; human; apolipoprotein B; diagnosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO2004005466-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human apolipoprotein B, marker for hepatocellular carcinoma.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            06-MAY-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADJ57400;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADJ57400 standard; protein; 2463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           apolipoprotein B-100 (apoB-100). ApoB-100 is a major apoprotein component of very-low density lipoproteins (VLDL), intermediate density lipoprotein sequence can be used in the composition of the invention. The present apolipoproteins for the binding and in vivo transport of nucleic acids. The composition is used to deliver nucleic acids to entaryotic cells, in cancers (particularly non-small cell lung carcinoma), diabetes, Cystic fibronsis and artericallarly non-small cell lung carcinoma), diabetes, Cystic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 394 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                         ILLUMIGEN BIOSCIENCES INC.
                                                                                                                                                                                                                                                                                                                                                                                 Bumgarner R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 KAEYKKNKHRH 11
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10; Conserv
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90.9%;
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Pred. No. 0.02:
1; Mismatches
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0.023;
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Query Match Best Local S Matches 10

10;

Similarity 90.9 10; Conservative

95.2%; 90.9%;

Score 60; DB 2; Length 138; Pred. No. 0.0076; 1; Mismatches 0; Indels

0, Gaps

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This sequence is an example of the peptide of the invention. It has the CC formula (I), or their variants with one or more internal deletions, consertions or substitutions, while retaining anti-coagulant properties of CC apolipoprotein B-100 (apoB-100). Z1-KAO-XI-KKNKHHHS-X-T-Z2 (I) X1 = S or CC (aa), Z2 = the C terminus of the peptide, or 1-47 amino acids compositions containing the peptide, a terminual amide group or 1-77 case. Compositions containing the peptide are used for simultaneous, contestatic sparead. They are also used to inhibit thromboplastin-mediated during or after surgery or in cases of heart attack, stroke etc.) and to combine the peptide as such or as part of a 98-aa peptide, inhibits angiogenesis, cellular differentiation or apoptosis. KRAD-14, contestation of the prothrombinase complex; and prevents activation of the surface of thromboplastin and of platelets by thrombin. Smaller than apoB-100, they act more quickly.

S X

Sequence 2463

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Query Match

Local Similarity

95.2**%**; 90.9**%**;

Score 60; Pred. No. Mismatches

DB 8;

Length 2463; Indels

0

0 Gaps

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Conservative

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                            This invention describes a novel method for the genetic treatment of hyperlipidemia by altering genes, in hepatocytes, for apoprotein (apo) B, E or Al. Low density lipoprotein (LDL) levels in the blood are reduced by altering an apo B gene (I) in a hepatocyte. The invention describes a method for the therapeutic and/or prophylactic method involving altering an apo B gene in hepatocytes by introducing the mutations Argi12Cys, Argi58Cys or Cysi58Arg and a method for ameliorating atheroscierosis by altering the apo Al gene in a hepatocyte so that the altered protein can dimerize. Altering expression of apo genes regulates levels of high and low density lipoprotein cholesterol. Altering expression of apo B, E and Al genes is used to treat or prevent atherosclerosis, coronary heart disease, Alzheimer's disease, hypobetalipoproteinemia, and dysbetalipoproteinemia. This sequence represents a fragment of the human Apo B protein described in the method of the invention
                                                                                                                                                                                                                                                                                       Claim 4; Page
                                                                                                                                                                                                                                                                                                                                      Mutating apolipoprotein genes in hepatocytes to control cholesterol levels, e.g. for treating or preventing hyperlipidemia, particularly
                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 1999-527333/44
                                                                                                                                                                                                                                                                                                                                                                                                                                         Steer CJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             12-FEB-1998;
30-JUN-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Apo B; Apo B; hyperlipidemia; human; treatment; hepatocyte; apoprotein; Apo A; low density lipoprotein; LDL; blood; therapy; atherosclerosis; high density lipoprotein; HDL; cholesterol; coronary heart disease; high density lipoprotein; HDL; cholesterol; coronary heart disease; Alzheimer's disease; hypobetalipoproteinemia; dysbetalipoproteinemia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human Apo B protein fragment.
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                                                                                                                                                                                                                                                                                                                                                                                                                                       Kren BT,
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                                                                                                                                                                                                                                                                                     75-83; 106pp; English
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98US-00108006.
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1. .3923
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /note= "Partial sequence, no start codon given'
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Sequence 3923 AA;

S

KAEYKKNKHRH 11

Query Match Best Local S Matches 10

Similarity

95.2%;

Score 60; DB 2; Pred. No. 0.31;

Length 4536;

Mismatches

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Indels

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Gaps

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Conservative

Sequence

4536 AA;

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                                 CC This sequence represents the human apoliporptoein B-100 (apoB-100). CC Fragments of this sequence can be used in the poptide of the invention, cc which has the formula (I), or their variants with one or more internal CC deletions, insertions or substitutions, while retaining anti-coagulant CC (I); X1 = S or Y; X2 = T or I; Z1 = the N terminus of the peptide, or 1-CC (I); X1 = S or Y; X2 = T or I; Z1 = the N terminus of the peptide, or 1-CC (I); X1 = S or Y; X2 = T or I; Z1 = the N terminus of the peptide, or 1-CC (I); X1 = S or Y; X2 = T or I; Z1 = the N terminus of the peptide, or 1-CC (I); X1 = S or Y; X2 = T or I; Z1 = the N terminus of the peptide, or 1-CC (I); X1 = S or Y; X2 = T or I; Z1 = the N terminus of the peptide, or 1-CC (I); X1 = S or Y; X2 = T or I; Z1 = the N terminus of the peptide, and the peptide are used for CC (I); X1 = S or Y; X2 = T or I; Z1 = the N terminus of the peptide, and the middle or sequential treatment of cancer, particularly to prevent metastatic spread. They are also used to inhibit thromboplastin.

CC (I); X1 = S or Y; X2 = T or I; Z1 = the N terminus of the peptide, stroke etc.)

CC (I); X1 = S or Y; X2 = T or I; Z1 = the N terminus of the peptide, inhibits of inhibit angiogenesis, cellular differentiation or apoptosis. KRAD-CC (I); which is active as such or as part of a 98-aa peptide, inhibits of activation of the prothrombinase complex; and prevents activation of the prothrombinase complex; and prevents activation of the prothrombinase complex; and of platelets by thromboplastin and of platelets by thromboplastin and of platelets by thromboplastin shaller than apoB-100, they act more quickly
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Best Local Similarity
Matches 10; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Peptide fragments of apo:lipo:protein B-100 with anticoagulant activity used for treating or preventing coagulation, inhibiting angiogenesis,
                                                                                                                                                                                                                                                                                                                                                                                                                                               Disclosure; Page 42-47; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Bruckdorfer KR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Anti-coagulant; apolipoprotein B-100; apoB-100; metastatic spread; thromboplastin-mediated process; cancer; inhibitor; blood coagulation; angiogenesis; cellular differentiation; apoptosis; KRAD-14;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cell differentiation
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90.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       and apoptosis.
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Pred. No.
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Best Local S
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             05-NOV-2002
                                                                                                  AAU98981 standard;
                                                             AAU98981;
                                                                                                                                                                                                                                                                                                                                                                                                                            The present sequence represents human apolipoprotein B-100 (apoB-100). (VLDL), intermediate density lipoprotein (IDL), low density lipoproteins ((LDL) and lipoprotein a. The specification describes a composition that composition that localisation sequences (see AAW9687-77) and nuclear localisation sequences (see AAW9687-97) for use in the composition can nucleic acids to eukaryotic cells, in vivo or in vitro, for expressing a they are used for gene therapy of cancers (particularly non-small cell lung carcinoma), diabetes, cystic fibrosis and arteriosclerosis
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                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 4536 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Composition comprising nucleic acid bound to LDL or VLDL lipoprotein used for delivering nucleic acid to cells for gene therapy and antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1999-070331/06.
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14-MAY-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human apolipoprotein B-100; apoB-100; very-low density lipoprotein; VLDL; apolipoprotein; binding; in vivo transport; nucleic acid; binding domain; nuclear localisation sequence; gene therapy; cancer; cystic fibrosis; non-small cell lung carcinoma; diabetes; arteriosclerosis.
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                                                                                                                                                                                                                                       3147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Amino acid sequence of human apolipoprotein B-100 (apoB-100).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAW96826;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAW96826 standard; protein; 4536 AA
                                                                                                                                                                                                                                                               1 KAEYKKNKHRH 11
                                                                                                                                                                                                                                                                                                                               l Similarity
10; Conserv
                                                                                                                                                                                                                          КАОУККИКНЯН 3157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JG,
(first entry)
                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ||:||||||
|KAQYKKNKHRH 3157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Hoogeveen RC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COLLEGE MEDICINE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             97US-00874807.
98US-00079030.
                                                                                          protein; 4560 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  98WO-US011927.
                                                                                                                                                                                                                                                                                                                                            95.2%;
                                                                                                                                                                                                                                                                                                       Score 60; DB 2;
Pred. No. 0.31;
1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Moore JP;
                                                                                                                                                                                                                                                                                                 0; Indels
                                                                                                                                                                                                                                                                                                                                               Length 4536;
                                                                                                                                                                                                                                                                                               0,
                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                         0,
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CC The invention relates to a method of inhibiting infection of a cell by cirus capable of forming a complex with lipoprotein. The method comprises of prevent its interaction with cell receptor (Preventing formation of and altering conformation of the complex to compress to interaction with cell receptor (Preventing CR using CR antibody to receptor or binding of lipoprotein complex to CR using CR complex to creativity of cells. In this method, inhibition of infection complex between the lipoprotein complex between the lipoprotein and dissociating the virus and lipoprotein, or by introducing of a virus, and dissociating the virus and lipoprotein, or by introducing of a virus-lipoprotein complex. Alternatively, the method involves preventing formation of a complex between the lipoprotein and complex which binds to an epitope included in the ligand binding domain of change conformational change conformation of a complex between the lipoprotein and complex which binds to an epitope included in the ligand binding domain of complex activity of the binds to an epitope included in the ligand binding domain of apoBl00, or anti-complex which binds to an epitope included in LDL receptor binding complex binding domain of apoBl00, or anti-complex with binds to an epitope included in LDL receptor binding complex binding domain of apoBl00, or anti-complex with binds to the receptor binding domain of apoBl00, or anti-complex with binds to the receptor binding domain of apoBl00, or anti-complex with LDL or the receptor binding domain of apoBl00.

CC viruses that complex with LDL or preventing infection of a cell by individual and the complex with LDL or preventing infection of a cell by individual and complex with LDL or very low-density lipoprotein (VLDL). The metabolism. The present sequence represents apollipoprotein Bl00 (apoBl00)
                                                                                  Query Match
Best Local S
Matches 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 11; Page 44-47; 49pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Inhibiting infection of cell by virus capable of forming complex with lipoprotein, by preventing formation or altering conformation of complex, or blocking cell receptor for the complex using antibody to receptor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2002-583528/62.
3171 KAQYKKNKHRH 3181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 25-OCT-2000; 2000US-0243594P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       24-OCT-2001; 2001WO-US050701.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (AGNE/) AGNELLO V.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20-JUN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human; low density lipoprotein receptor; LDLR; apolipoprotein E; apoE; virus-lipoprotein complex; apolipoprotein B100; apoB100; VSV; Flaviviridae virus; vesicular stomatitis virus; cholesterol metabolism.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ™O200248388-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human apolipoprotein B100 (apoB100).
                                 1 KAEYKKNKHRH 11
                                                                                    10;
                                                                                                 Similarity
                                                                                                                                                          4560 AA;
                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /note= "Epitope region; specifically claimed in claim 11"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                                               90.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  "Epitope region; specifically claimed in claim 11"
                                                                 Score 60; DB 5;
Pred. No. 0.31;
1; Mismatches
                                                                          1;
                                                                                                       5
                                                           ٥,
                                                                                               Length 4560;
                                                           ٥,
                                                       Gaps
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RESULT 13

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                                                                                                                                                                   The invention discloses a composition comprising two or more isolated rat CC or human polynucleotides or a polynucleotide which represents a fragment, CC derivative or allelic variation of the nucleic acid sequence. Also CC claimed are a vector comprising the novel polynucleotide, a host cell comprising the vector, a method for identifying a nucleotide sequence which is differentially regulated in an animal subjected to pain and a CC kit to perform the method, an array, a method for identifying an agent that is differentially expressed in neuronal tissue of a first animal CC subjected to pain, a method for identifying a agent CC compound that regulates the expression of the polynucleotide sequence the expression of a polynucleotide sequence which is differentially compound that regulates the activity of one or more of the polynucleotides, a method for producing a pharmaceutical composition, a method for identifying a compound useful in treating compound that regulates the activity of one or more of the specification, a method for identifying a compound useful in treating compound that regulates the contivity in an animal of one or more of the polypoptides given in the compound a pharmaceutical composition comprising the one or more compound that restriction composition comprising the one or more compound that set activity is useful for preparing a medicament for treating pain (e.g. spinal segmental nerve injury (Chung), chronic constriction contrivity is useful for preparing a medicament for treating contributes of the specification which is differentially expressed during pain. Note: The sequence data for this patent did not form part of the printed contribution of this patent did not form directly from WIPO at the first animal contribution of the specification, but was obtained in electronic form directly from WIPO at the first animal contribution of the specification and specification of the specification
                                        Matches
                                                                              Query Match
                                                                                                                         Sequence 4561 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 1; Page; 1017pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New composition comprising two or more isolated polypeptides, useful for preparing a medicament for treating pain in an animal.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENBANK; X04714.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2003-268312/26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Woolf C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         14-AUG-2001; 2001US-0312147P.
01-NOV-2001; 2001US-0346382P.
26-NOV-2001; 2001US-0333347P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            14-AUG-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     27-FEB-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO2003016475-A2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human, pain; neuronal tissue; gene therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human Protein X04714, SEQ ID NO 14384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   29-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADD48677;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADD48677 standard;
                                                                                                                                                         ftp.wipo.int/pub/published_pct_sequences.
                                                             Local
                                      10; Conservative
  1 KAEYKKNKHRH 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         segmental nerve injury; chronic constriction injury; CCI; nerve injury; SNI; Chung.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GEN HOSPITAL CORP.
BAYER AG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     D'urso D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2002WO-US025765
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
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                                                         95.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Befort K,
                                      Score 60; DB 7;
Pred. No. 0.31;
1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Costigan
                                      0,
                                                                              Length 4561;
                                        Indels
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                                      Gaps
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RESULT 15
ABR40253
ID ABR40
XX
AC ABR40
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AAO15893
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                                                                                                                                                                                 Matches
                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                 Best Local Similarity
                                                                                                                                                                                                                                                                           The invention comprises methods of detecting the presence or absence of at least one allelic variant of a polymorphic region of a gene associated with cardiovascular disease. The invention specifically relates to detecting the region of a cytochrome C oxidase subunit VIb (COX6B) gene that is associated with high serum cholesterol, or the region of the N-acetylglucosaminyl transferase component glycosylphosphatidylinosicol-1 (GPI-1) gene that is associated with low serum high density lipoprotein (HDL). The methods of the invention are useful for detecting a predisposition to high serum cholesterol, low serum HDL and cardiovascular disease. The methods are also useful for elucidating pathological pathways, developing diagnostic assays and new drug therapies for such disorders. The present amino acid sequence represents a human protein that is associated with high serum cholesterol, low serum HDL and/or cardiovascular disease
                                                                                                                                                                                                                                               Sequence 4563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human; gene therapy; single nucleotide polymorphism; SNP; cytochrome C oxidase subunit VIb; COX6B; high serum cholesterol; GPI-1; N-acetylglucosaminyl transferase component; cardiovascular disease; HDL; glycosylphosphatidylinositol-1; low serum high density lipoprotein.
                               ABR40253 standard; protein; 4563 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; Page 158-168; 199pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Detecting the presence or absence of an allelic variant of a polymorphic region of COX6B and/or GPI-1 gene, useful for detecting a predisposition to high serum cholesterol, low serum HDL and cardiovascular disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Braun A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   09-MAR-2001; 2001US-00802640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   05-MAR-2002; 2002WO-US006728
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     19-SEP-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO200272604-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human apolipoprotein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       30-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AA015893;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAO15893 standard; protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (SEQU-) SEQUENOM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3171
                                                                                                                 3174 KAQYKKNKHRH 3184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2002-750478/81.
DB; ABT13015.
                                                                                                                                                                               10;
                                                                                                                                                1 KAEYKKNKHRH 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Bansal A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      KAQYKKNKHRH
                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                 A
                                                                                                                                                                                               95.2%;
90.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Kleyn PW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (APOB).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4563 AA
                                                                                                                                                                                               Score 60; DB 5
Pred. No. 0.31;
                                                                                                                                                                               Mismatches
                                                                                                                                                                                                              <u>ن</u>
                                                                                                                                                                               0
                                                                                                                                                                                                              Length 4563;
                                                                                                                                                                               0
                                                                                                                                                                               Gaps
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ABR40253;

0

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CC Inength that is targeted to a novel compound that is 8-50 nucleotides in CC length that is targeted to a nucleic acid molecule encoding CC applipoprotein B (ApoB), and specifically hybridises with and inhibits CC specifically hybridises with at least an 8-nucleotide portion of an anchoric acid molecule encoding ApoB; or which CC active site on a nucleic acid molecule encoding ApoB; or which CC antention has antilipaemic, antiarteriosclerotic, antidiabetic, and cardiovascular activity. The compound of the CC anorectic, and cardiovascular activity. The compound may have a use in CC gene therapy. The antisense oligonucleotide is useful for treating an condition involving abnormal lipid metabolism, a condition involving an abnormal lipid metabolism, a condition involving CC abnormal metabolism, atherosclerosis, or a condition (CC specifically Type 2 diabetes), obesity, atherosclerosis or coligonucleotide is also useful for modulating glucose levels (particularly plasma or serum glucose levels) in a human or diabetic (specifically VLDL, hDL) or serum triglyceride levels, lipoprotein levels (correventing or delaying the onset of a disease or condition associated for modulating or the onset of an increase in glucose levels in the animal or the anisociated for human. The present sequence is used in the exemplification of the
                                                                      Query Match
Best Local S
Matches 10
                                                                                                                                   Sequence 4563 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Disclosure; Page 118-138; 160pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New antisense oligonucleotides for modulating apolipoprotein B, especially for preventing or treating atherosclerosis, hyperlipidemia diabetes, or for modulating glucose, cholesterol, lipoprotein or triglyceride levels.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Crooke RM, Graham MJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-AUG-2001; 2001US-00920033.
30-APR-2002; 2002US-00135985.
15-MAY-2002; 2002US-00147196.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          30-JUL-2002; 2002WO-US024247.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; alipoprotein B; ApoB; antilipaemic; antiarteriosclerotic; antidiabetic; anorectic; cardiovascular; gene therapy; lipid metabolism; cholesterol metabolism; atherosclerosis; hyperlipidaemia; diabetes; type 2 diabetes; obesity; atherosclerosis; cardiovascular disease; glucose.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     13-FEB-2003
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3174 КАОҮККИКНЯН
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human alipoprotein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20-JUN-2003 (first entry)
                                                             10; Conserv
                              1 KAEYKKNKHRH 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2003-268105/26.
DB; ACC62114.
                                                                Conservative
                                                                           95.2%;
90.9%;
                                                       Score 60; DB 6; Pred. No. 0.31; 1; Mismatches
                                                       ٥,
                                                                                  Length 4563;
                                                     Indels
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                                            Gaps
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Search completed: January 12, 2005, 13:25:39 Job time : 103.484 secs

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Run on:

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e 44592, A
e 1083, Ap
e 13830, A
e 23280, A
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e 6, Appli

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              January 12, 2005, 13:14:21; Search time 25.9032 Seconds (without alignments) 28.162 Million cell updates/sec
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1: /cgn2_6/ptodata/1/iaa/5A_COMB.pep:*

2: /cgn2_6/ptodata/1/iaa/5B_COMB.pep:*

3: /cgn2_6/ptodata/1/iaa/6A_COMB.pep:*

4: /cgn2_6/ptodata/1/iaa/6B_COMB.pep:*

5: /cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*

6: /cgn2_6/ptodata/1/iaa/backfiles1.pep:*
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                                      US-09-269-533A-1
US-09-180-422B-19
US-09-190-422B-12
US-09-190-030-83
US-09-079-030-214
US-09-180-422B-27
US-09-180-06C-1
US-09-180-422B-1
US-09-180-422B-7
US-09-180-422B-7
US-09-180-422B-7
US-09-180-422B-7
US-09-180-422B-7
US-09-180-422B-7
US-09-180-422B-7
                                                                                                                                        Sequence 1, Appli
Sequence 97, Appl
Sequence 97, Appl
Sequence 83, Appl
Sequence 214, Appl
Sequence 214, Appl
Sequence 1, Appli
Sequence 1, Appli
Sequence 1, Appli
Sequence 1, Appli
Sequence 11, Appli
Sequence 11, Appli
Sequence 11, Appli
Sequence 11, Appli
Sequence 204, App
Sequence 18, Appli
Sequence 215, App
Sequence 8, Appli
Sequence 8, Appli
Sequence 8, Appli
Sequence 6, Appli
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7, Appli
216, App
37552, A
52769, A
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APPLICANT: Halbert, Gavin
APPLICANT: Halbert, Gavin
APPLICANT: Owens, Moira
APPLICANT: Baillie, George
ITILE OF INVENTION: No. 6670452-Naturally Occurring Lipoprotein Particle
FILE REFERENCE: P07885US
CURRENT FILING DATE: 1999-06-01
PRIOR APPLICATION NUMBER: US/09/269,533A
CURRENT FILING DATE: 1999-06-01
PRIOR APPLICATION NUMBER: PCT/GB97/02610
PRIOR FILING DATE: 1997-09-25
PRIOR APPLICATION NUMBER: GB 9620153.8
PRIOR APPLICATION NUMBER: GB 9620153.8
PRIOR FILING DATE: 1996-09-27
NUMBER OF SEQ ID NOS: 7
SOFTWARE: PatentIn version 3.0
LENGTH: 11
    RESULT 2
US-09-180-422B-19
US-09-180-422B-19
; Sequence 19, Application US/09180422B
; Patent No. 6444644
; GENERAL INFORMATION:
ETTELAIB, CAMILLE
; TITLE OF INVENTION: ANTICOAGULANT PEPTIDE FRAGMENTS DERIVED
FROM APOLIPOPROTEIN B-100
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME/KEY: misc feature LOCATION: ()...()
OTHER INFORMATION: Apo B binding site sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
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NUMBER OF SEQUENCES: 27
CORRESPONDENCE ADDRESS:
ADDRESSEE: NIXON & VANDERHYE, P.C.
                                                                                                                                                                                                                                                                                                  1 KAEYKKNKHRH 11
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1 KAEYKKNKHRH 11
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US-09-184-796A-19781
US-09-248-796A-19781
US-09-248-796A-19540
US-09-248-796A-19540
US-09-32B-352-7100
US-09-32B-352-7100
US-09-270-767-61968
US-09-270-767-43111
US-09-270-767-44592
US-09-270-767-43111
US-09-270-767-43111
US-09-270-767-3111
US-09-270-767-3111
US-09-270-767-3111
US-09-270-767-3111
US-09-270-767-3111
US-09-270-767-44592
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Sequence 19781, A
Sequence 89, Appl
Sequence 7100, Ap
Sequence 6, Appli
Sequence 6, Appli
Sequence 61968, A
Sequence 60040, A
Sequence 43111, A
Sequence 43111, A
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Sequence
Sequence
Sequence
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Result No.

Score

Query

Length

DB

SUMMARIES

138 394 840 4536 4536 4563

0

Gaps

0

Minimum Maximum

88 88

seq

length:

2000000000

Total number Searched: Sequence: Title: Perfect score:

US-10-657-404A-1 63 KAEYKKNKHRH 11

Scoring table:

BLOSUM62 Gapop 10.0 ,

Gapext 0

Database

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

,, Gaps

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COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
SOFTWARE: PATENT: PC-DOS/MS-DOS
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/079,030
CLASSIFICATION:
CONCULTENTLY Herewith
ATTORNEY ACRESSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                     Sequence 97, Application U8/09079030

Patent No. 6635623

GENERAL INFERMATION: APPLICANT: Guevera, Jr., Juan G. APPLICANT: Hoogeveen, Ron C. APPLICANT: Hoogeveen, Ron C. TITLE OF INVENTION: LIPOPROTEINS AS NUCLEIC ACID DELIVERY VECTORS FOR TRANSFECTION OF EUKARYOTIC CELLS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TOPOLOGY: Single

MOLECULE TYPE: peptide
US-09-180-422B-19

TOPOLOGY: linear
peptide
US-09-180-422B-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 95.2%; Score 60; DB 4; Length 14;
Matches 10; Conservative 1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQUENCES: 229
CORRESPONDENCE ADDRESS:
ADDRESSEE: Arnold, White & Durkee
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPALIBLE
SOFTWARE: Patentin PC-DOS/MS-DOS
CURRENT APPLICATION DATA:
PLICATION DATA:
PILLATION MARER: US/09/180,422B
ATPORMEY/ACENT INFORMATION:
REGISTRATION UNBER: US/09/180,422B
ATTORMEY/ACENT INFORMATION:
REGISTRATION WIMBER: 3663
TELECOMPUNICATION INFORMATION:
REGISTRATION WIMBER: 117-268
TELEPHONE: 7038164000
TELEPAX: 7038164100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: amino acids
STRANDEDNESS: single
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RESULT 5
US-09-079-030-83
; Sequence 83, Application US/09079030
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TOPOLOGY: Is single
MOLECULE TYPE: Peptide
US-09-180-422B-12
STRANDEDNESS SEQ ID NO: 12:
                                                                                                                          Query Match

Best Local Similarity 95.2%; Score 60; DB 4; Length 138

Matches 10; Conservative 1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                            TELECOMMUNICATION INFORMATION:
TELEPHONE: 7038164000
INFORMATION FOR SEQ ID NO: 12:
SEQUENCE CHARACTERISTICS:
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Patent No. 644464
GENERAL INFORMATION:
APPLICANT: BRUCKDORFER, KARL R
ETTELIALE, CAMILLE
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Best Local Similarity 90.9%,
10; Conservative
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FILING DATE: 07-Dec-1998
ATTORNEY/AGENT INFORMATION: «Unknown»
NAME: BADOFP B. J.
REGISTRATION NUMBER: 3663
TEP POLAGINATION NUMBER: 117-268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-079-030-97
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SEQUENCE CHARACTERISTICS:
LENGTH: 50 minn acids
STRANDEDNESS:
TYPE: minn acid
STRANDEDNESS:
TOPOLOGY: linear
                                                                                           48 KAQYKKNKHRH 58
                                                                                                                     1 KAEYKKNKHRH 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
COMPUTER: IBM PC Compatible
SOFTWARE: Patentin Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQUENCES: 27
CORRESPONDENCE ADDRESS:
ADDRESSE: NIXON & VANDERHYE, P.C.
STREET: 1100 NORTH GLEBE ROAD, 8TH FLOOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE OF INVENTION: ANTICOAGULANT PEPTIDE FRAGMENTS DERIVED
                                                                                                                                                                                                                                                                                LENGTH: 138 amino acids TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CITY: ARLINGTON
STATE: VA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2 KAQYKKNKHRH 12
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                                                                                                                                                        Length 138;
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1 KAEYKKNKHRH 11

KAQYKKNKHRH 11

TELEPAX: 7038164100
INFORMATION FOR SEQ ID NO: 19:
SEQUENCE CHARACTERISTICS:

.09-079-030-97

ATTORNEY AGENT INFORMATION:
NAME: MCMillian, Nabeela R.
REGISTRATION NUMBER: P-43,363
TELECOMMUNICATION INFORMATION:

ARAG: 003

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COUNTRY: US. ZIP: 77210 STREET: F.C. TTY: Houston

USA

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RESULT 6
US-09-079-030-214
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Best Local Similarity
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INFORMATION FOR SEQ ID NO: 1
SEQUENCE CHARACTERISTICS:
LENGTH: 394 amino acids
TYPE: amino acid
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
COMPUTER: BM PC COMPATION
COMPUTER: PATENT: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION DATA:
APPLICATION UMBER: US/09/079,030
FILING DATE: Concurrently Herewith
CLASSIFICATION:
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APPLICANT: Hoogeveen, Ron C.
APPLICANT: HOOGE, Paul J.
TITLE OF INVENTION: LIPOPROTEINS AS NUCLEIC ACID DELIVERY
TITLE OF INVENTION: VECTORS FOR TRANSFECTION OF EUKARYOTIC CELLS
NUMBER OF SEQUENCES: 229
CCRRESPONDENCE ADDRESS:
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/079,030
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATTORNEY/AGENT INFORMATION:
NAME: McMillian, Nabeela R.
REGISTRATION NUMBER: P-43,363
REFERENCE/DOCKET NUMBER: ARAG:003
                                                                                                                                                                                                                                                                                                                                      APPLICANT: Guevera, Jr., Juan
APPLICANT: Hoogeveen, Ron C.
APPLICANT: Moore, Paul J.
                                                                                                                                                                                                                                                         TITLE OF INVENTION: LIPOPROTEINS AS NUCLEIC ACID DELIVERY
TITLE OF INVENTION: VECTORS FOR TRANSFECTION OF EUKARYOTIC CELLS
NUMBER OF SEQUENCES: 229
CORRESPONDENCE ADDRESS:
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                                                                                                                                             COUNTRY: U
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TOPOLOGY: linear;
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MOLECULE TYPE: protein
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SEQUENCE DESCRIPTION: SEQ ID NO: 27:
US-09-180-422B-27
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US-09-180-4228-27
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    Best Local Similarity Matches 10; Conserv
                                       Query Match
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GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 27, Application US/09180422B
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INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                      INFORMATION FOR SEQ ID NO: 27:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: McMillian, Nabeela R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE CHARACTERISTICS
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                                                                                                                                                                                                                                                                                                COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIN Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/180,422B
FILING DATE: 07-Dec-1998
CLASSIFICATION: <unclearly continuous continuous continuous continuous artorney/AGENT INFORMATION:
NAME: SADOFF, B.J.
REFERENCE/DOCKET NUMBER: 117-268
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
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TOPOLOGY: li
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE/DOCKET NUMBER: ARAG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ETTELAIE, CAMILLE
TITLE OF INVENTION: ANTICOAGULANT PEPTIDE FRAGMENTS DERIVED
FROM APOLIPOPROTEIN B-100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM: MEDIUM TYPE: Floppy disk
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: BRUCKDORFER, KARL R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               447 KAQYKKNKHRH 457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 KAEYKKNKHRH 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      amino acid
                                                                                                                                                         TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CITY: ARLINGTON STATE: VA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADDRESSEE: NIXON & VANDERHYE, P.C. STREET: 1100 NORTH GLEBE ROAD, 8TH FLOOR
                                                                                                                                                                                                   LENGTH: 4536 amino acids
                                                                                                                                                                                                                                                              TELEPHONE: 7038164000
TELEFAX: 7038164100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         840 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           512/418-3000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Concurrently Herewith
95.2%; Score 60; DB 4; Length 4536; 90.9%; Pred. No. 0.15; ative 1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                95.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ARAG: 003

    Mismatches

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Pred. No. 0.028;
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    0,
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Diskette

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RESULT 9
US-09-108-006C-1
                                                                                                                                                                                                            Sequence 1, Application US/09108006C
Patent No. 6524613
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                 ATTORNEY AGENT INFORMATION:

NAME: MCMIllian, Nabeela R.

REGISTRATION NUMBER: P-43 363

TELERRENCE PLOCKET NUMBER: ARAG:003

TELEBHONE: 512/418-300

INFORMATION FOR SEQ ID NO: 1:

LEGUMATION FOR SEQ ID NO: 1:

STEANDENESS: amino acids

TYPER: amino acids

TOPOLOGY: linear

US-09-079-030-1 linear
                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM EC COMPACTION
OPERATING SYSTEM: COMPACTION
OPERATING SYSTEM: PC-DOS/MS-DOS
CURRENT APPLICATION DATA:
PILING DATE: Datentin Release #1.0, Version #1.30
PILING DATE: CONCURRENT US/09/079,030
ATTORNEY/AGENT TMEROBMATTON:
                                                                         Bandyopadhyay, Paramita
NUMBER OF INVENTION: Hepatocellular Chimeraplasty
CORRESPONDENCE ADDRESS: 62
ADDRESSE: Kimeragen, Inc.
                                                                                                                                                                                 APPLICANT: Steer, Clifford J. Kren, Betsy T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                             3147 KAQYKKNKHRH 3157
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       09-079-030-1
                                                           COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                       1 KAEYKKNKHRH 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STATE.
COUNTRY: UL.
77210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Guevera, Jr.
APPLICANT: Hoogeveen, R
APPLICANT: Moore, Paul
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NRESPONDENCE ADDRESS:
ADDRESSEE: Arnold, White & Durkee
STREET: P.O. Box 4433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ITLE OF INVERTION: LIPOPROTEINS AS NUCLEIC ACID DELIVERY
THESE OF INVENTION: VECTORS FOR TRANSFECTION OF EUKARYOTIC CELLS
                                                                                                                                                                                                                                                                                                                                                                     ilarity 95.2%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3147
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1, Application US/09079030
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 KAEYKKNKHRH 11
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Guevera, Jr., Juan G.
                                                                                                                                                                                                                                                                                                                                                             Score 60; DB 4; Length 4536; 1; Mismatches
                                                                                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                         0; Indels
                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                            ,0
                                                      CURRENT APPLICATION NUMBER: US/09/538,092
PRIOR APPLICATION NUMBER: 2000-03-29
PRIOR PLING DATE: 2000-03-29
PRIOR FILING DATE: 199-04-01
PRIOR PLING DATE: 199-04-01
PRIOR FILING DATE: 199-04-01
PRIOR FILING DATE: 2000-02-01
VUMBER OF SEQ ID NOS: 1387
SEQ ID NO 842
LENGTH: 4563
TYPE: PRT
                                                                                                                                                                                                                                                                                                  RESULT 10
US-09-538-092-842
                                                                                                                                                                                                                                                                                                                                                                     В
                                   TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                             Sequence 84
Patent No.
                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 90.90,
10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                            Ş
OCATION: (0) (0)
                                                                                                                                                          APPLICANT: Giot, Loic
APPLICANT: Giot, Traci A.
TITLE OF INVENTION: Protein-Protein Complexes and Method of Using Same
                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-108-006C-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 4563 amino acids
TYPE: amino acids
                                                                                                                                                                                                                                                         INFORMATION:
                                                                                                                                                                                                                                                                                                                                             3174 KAQYKKNKHRH 3184
                                                                                                                                                                                                                                                                 842, Application US/09538092
5. 6753314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/054,837
APPLICATION NUMBER: 60/054,937
APPLICATION NUMBER: 60/064,996
APPLICATION NUMBER: 60/074,497
FILING DATE: 12-FEB-1998
APPLICATION NUMBER: FCT US 98/08834
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                    MOLECULE TYPE: Protein
SEQUENCE DESCRIPTION: SEQ ID NO: 1:
                                                                                                                                                                                                                                                                                                                                                                      1 KAEYKKNKHRH 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME: Friebel, Thomas
REGISTRATION NUMBER: 29258
REFERENCE/DOCKET NUMBER: 7991-015-999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION DATA:
APPLICATION NUMBER: 60/054,288
FILING DATE: 30.APR-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/108,006C
FILING DATE: 30-Jun-1992
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ZIP: 18940
COMPUTER READABLE FORM:
MEDIUM TYPE: Diske
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ELEPHONE: 215-504-4444
ELEFAX: 215-504-4545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ for Windows Version 2.0
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95.2%; Score 60; F 90.9%; Pred. No. 0

Mismatches

DB 4; Length 4563; 0; Indels

0; Gaps

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THER INFORMATION: Polypeptide Accession Number P04114

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RESULT 12
US-09-180-422B-11
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US-09-180-4228-9
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Sequence 11, Application US/09180422B
PALENT NO. 6444644
GENERAL INFORMATION:
APPLICANT: BRUCKDORFER, KARL R
                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                  Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 9, Application US/091804228
Patent No. 6444644
GENERAL INFORMATION:
BRUCKDORFER, KARL R
ETTELAIE, CAMILLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME: SADOFF, B.J.

REGISTRATION NUMBER: 36663
REFERENCE/DOCKET NUMBER: 117-268
TELECOMMUNICATION INFORMATION:
TELEPHONE: 7038164000
TELEPHONE: 7038164100
INFORMATION FOR SEQ ID NO: 9:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/180,422B
FILING DATE: 07-Dec-1998
CLASSIFICATION: <Unknown>
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                 NAME/KEY: Modified-site
LOCATION: 4
OTHER INFORMATION: /note= "Xaa can be Ser or Tyr"
SEQUENCE DESCRIPTION: SEQ ID NO: 9:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CORRESPONDENCE ADDRESS:
ADDRESSEE: NIXON & VANDERHYE, P.C.
STREET: 1100 NORTH GLEBE ROAD, 8TH FLOOR
CITY: ARLINGTON
                                                                                                                                                                                                                                                                                                                                                                     MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION: ANTICOAGULANT PEPTIDE FRAGMENTS DERIVED FROM APOLIPOPROTEIN B-100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3174 KAQYKKNKHRH 3184
                                                                                                                                                                                                                                                                                                                                                         FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 KAEYKKNKHRH 11
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                                                                                                                                                                                                     9
                                                                                                                                                         KAEYKKNKHRH 11
                                                                                                                                  KAQXKKNKHRH 11
                                                                                                                                                                                                                                                                                                                                                                                     TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COUNTRY: USA
ZIP: 22201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STATE: VA
                                                                                                                                                                                                                                                                                                                                                                                                                                       ENGTH: 12 amino acids
                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                  82.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    95.2%;
                                                                                                                                                                                                   Score 52; DB Pred. No. 0.01
1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 60; DB 4
Pred. No. 0.15;
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                                                                                                                                                                                                                  DB 4;
0.01;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    <u>..</u>
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                                                                                                                                                                                                                                  Length 12;
                                                                                                                                                                                                     Indels
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Sequence 1, App...
Sequence 1, App...
Patent No. 6444644
; GENERAL INFORMATION:
BRUCKDORFER, KARL R
ETTELAIE, CAMILLE
ETTELAIE, ANTICOAGUL
APOLI
                                                                                                                                                                                                                                                                                                                          RESULT 13
US-09-180-422B-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-180-422B-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELECOMMUNICATION INFORMATION:
TELEPHONE: 7038164000
TELEPAX: 7038164100
INFORMATION FOR SEQ ID NO: 11:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Veri
CURRENT APPLICATION NUMBER: US/09/180,422B
FILING DATE: 07-Dec-1998
STATE: VA
COUNTRY: USA
ZIP: 22201
ZIP: 22201
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
                                                                                                                   CORRESPONDENCE ADDRESS:
ADDRESSEE: NIXON & VANDERHYE, P.C.
STREET: 1100 NORTH GLEBE ROAD, 8TH FLOOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LOCATION: 13
OTHER INFORMATION: /note= "Xaa can be SEQUENCE DESCRIPTION: SEQ ID NO: 11:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CLASSIFICATION: <Unknown>
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                           NUMBER OF SEQUENCES:
                                                                                                                                                                                           TITLE OF INVENTION: ANTICOAGULANT PEPTIDE FRAGMENTS DERIVED FROM APOLIPOPROTEIN B-100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE CHARACTERISTICS:
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ADDRESSEE: NIXON & VANDERHYE,
STREET: 1100 NORTH GLEBE ROAD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ETTELAIE, CAMILLE
TITLE OF INVENTION: ANTICOAGULANT PEPTIDE FRAGMENTS DERIVED
FROM APOLIPOPROTEIN B-100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                          1 KAEYKKNKHRH 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               9; Conservative
                                                                                               CITY: ARLINGTON
                                                                                                                                                                                                                                                                                                                                                                                                      KAQXKKNKHRH 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REGISTRATION NUMBER: 36663
REFERENCE/DOCKET NUMBER: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CITY: ARLINGTON STATE: VA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OTHER INFORMATION: /note= "Xaa can be
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY: Modified-site LOCATION: 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME: SADOFF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                82.5%;
81.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 52; DB 4;
Pred. No. 0.011;
1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      117-268
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), 8TH FLOOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 13;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ser or Tyr"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
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APPLICANT.

APPLICANT.

Guevera, Jr., Juan G.

APPLICANT: Hoogreen, Ron C.

TITLE OF INVENTION: LIPOPROTEINS AS NUCLEIC ACID DELIVERY

NUMBER OF EGQUENCES: 229

Commenciation VECTORS FOR TRANSFECTION OF EUXARYOTIC CELLS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-180-422B-1 DESCRIPTION: SEQ ID NO: 1:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 82.5%; Score 52; DB 4; Length 14;
Matches 9; Conservative 1; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             INFORMATION FOR SECOND NO. 1:
SEQUENCE CHARACTERISTICS:
TYPE: amino acids
STRANDENNESS: Single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REGISTRATION NUMBER: 36663
TELECOMMUNICATION INFORMATION: 1.
TELEPHONE: 7038164000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY: Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
CURRENT APPLICATION DATA: Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OTHER INFORMATION: /note= "Xaa represents Ser or Tyr"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME/KBY: Modified-site
                                                                                                                                                                                                                                                                                             Release #1.0, Version #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       117-268
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Search completed: January 12, 2005, 13 33 15
                                                                                                                                            ₽
                                                                                                                                                                                                                                             MOLECTIE TYPE: peptide
US-09-180-422B-18

DESCRIPTION: SEQ ID NO: 18:
                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                           INFORMATION FOR SEQ ID NO: 18
SEQUENCE CHARACTERISTICS:
LENGTH: 14 amino acids
STRANDEDNESS: Single
                                                                                                                                                                     Local Similarity 81.8 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 18, Application US/09180422B

Sequence 18, Application US/09180422B

Patent No. 6444644

GENERAL INFORMATION:

APPLICANT: BRUCKDORFER, KARL R

FITLE OF INVENTIOLE ANTILLE

FROM APOLIPOPROTEIN B-100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IMP PC compactble
COMPUTER: Floppy disk
OPERATING SYSTEM PC compactble
CURRENT APPLICATION DATA: Pc-DOS/MS-DOS
APPLICATION DATA: Pc-DOS/MS-DOS
APPLICATION NUMBER: US/09/180, Version #1.25
PILING DATE: 07-Dec-1998
ATTORNEY/AGENT INFORMATION:
PROTECTION: **CILARONIN**
PRO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 15
US-09-180-422B-18
                                                                                                                                1 KAEYKKNKHRH 11
                                                                                                1 KAQSKKNKHRH 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 용
                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME: SADOFF, B.J.
REGISTRATION NUMBER: 36663
TELECOMMUNICATION INFORMATION:
1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ,
US-09-079-030-204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 82.5*; Score 52; DB 4; Length 18;
Matches 9; Conservative 1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQUENCES: 27
CORRESPONDENCE ADDRESS:
ADDRESSEE; ADDRESS:
STREET: 1100 NORTH GLEBE ROAD, 8TH FLOOR
                                                                                                                                                                                                                                                                                                                                                                                                              TELEPHONE: 70381640
TELEFAX: 7038164100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           INFORMATION FOR SEQUENCE CHARACTER SEQUENCE CHARACTERISTICS: 204: TYPE: amino acids STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       9 KAQYKKNKHR 18
                                                                                                                                       81.0%; Score 51; DB 4; Length 14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                       117-268
                                                                                                                          Indels
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                                                                                                       Gaps
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04, Application US/09079030

09-079-030-204

1 KAQXKKNKHRH 11

FEATURE:

0, Gaps

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Page 6

MOLECULE TYPE: Peptide

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPATELL
SOFTWARE: IBM PC COMPATIBLE
COMPATING SYSTEM: PC-DOS/MS-DOS
APPLICATION NUMBER: US/09/079,030
CLASSTPTOMFOM: CONCURRENT BOTTON JOINT HELDERS
CONTROLL OF THE CONT

UMBER: US/09/079,030 Concurrently Herewith

STREET: P.C. CITY: Houston Texas Texas USA

STALE.
COUNTRY: US.
77210

CORRESPONDENCE: ADDRESS:
ADDRESSEE: Arnold, White & Durkee
STREET: P.O. Box 4433

NAME: MCM1111an, Nabeela REGISTRATION NUMBER: P-43,363
TELECOMMUNICATION INFORMATION: ARAG: ATTORNEY/ACENT INFORMATION:
NAME: McMillian, Nabeela

ARAG: 003

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Minimum DB seq length: 0
Maximum DB seq length: 200000000
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Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Post-processing: Minimum Match 0%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OM protein -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     protein search, using sw model
Published Applications AA:*

1: /cgn2_6/prodata/1/pubpaa/US07 PUBCOMB.pep:*

2: /cgn2_6/prodata/1/pubpaa/US06 NEW PUB.pep:*

3: /cgn2_6/prodata/1/pubpaa/US06 NEW PUB.pep:*

4: /cgn2_6/prodata/1/pubpaa/US06 PUBCOMB.pep:*

5: /cgn2_6/prodata/1/pubpaa/US07 PUBCOMB.pep:*

6: /cgn2_6/prodata/1/pubpaa/US08 NEW PUB.pep:*

7: /cgn2_6/prodata/1/pubpaa/US08 NEW PUB.pep:*

9: /cgn2_6/prodata/1/pubpaa/US08 PUBCOMB.pep:*

10: /cgn2_6/prodata/1/pubpaa/US09 PUBCOMB.pep:*

11: /cgn2_6/prodata/1/pubpaa/US09 PUBCOMB.pep:*

12: /cgn2_6/prodata/1/pubpaa/US09 PUBCOMB.pep:*

13: /cgn2_6/prodata/1/pubpaa/US09 NEW PUB.pep:*

14: /cgn2_6/prodata/1/pubpaa/US10B_PUBCOMB.pep:*

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16: /cgn2_6/prodata/1/pubpaa/US10B_PUBCOMB.pep:*

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18: /cgn2_6/prodata/1/pubpaa/US10B_PUB.pep:*

19: /cgn2_6/prodata/1/pubpaa/US10B_PUB.pep:*

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19: /cgn2_6/prodata/1/pubpaa/US10B_PUB.pep:*

19: /cgn2_6/prodata/1/pubpaa/US10B_PUB.pep:*

19: /cgn2_6/prodata/1/pubpaa/US10B_PUB.pep:*
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63
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1608061 seqs, 361289386 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            KAEYKKNKHRH 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

| 13 | 12 | 11 | 10 | 9 | 8 | 7 | 0 | | 4 | ω | N | | Result No. |
|-------------------|--------------------|-------------------|-------------------|-------------------|--------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-----------------------|
| 47 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 63 | 63 | Score |
| 74.6 | 95.2 | 95.2 | 95.2 | 95.2 | 95.2 | 95.2 | 95.2 | 95.2 | 95.2 | 95.2 | 100.0 | 100.0 | Query Match |
| 20 | 4563 | 4563 | 4563 | 4563 | 4563 | 4563 | 4563 | 3000 | 24 | 20 | 11 | 11 | Query Match Length DB |
| 14 | 17 | 16 | 16 | 14 | 10 | 10 | 9 | 16 | 15 | 15 | 17 | 9 | DB. |
| US-10-115-072-14 | US-10-428-817A-124 | US-10-741-601-433 | US-10-741-601-432 | US-10-403-902A-32 | US-09-751-708A-128 | US-09-802-640-32 | US-09-870-759-128 | US-10-741-601-431 | 5 US-10-333-313-5 | US-10-333-313-2 | US-10-657-404A-1 | US-09-269-533A-1 | ID |
| Sequence 14, Appl | Sequence 124, App | Sequence 433, App | Sequence 432, App | Sequence 32, Appl | Sequence 128, App | Sequence 32, Appl | Sequence 128, App | Sequence 431, App | Sequence 5, Appli | Sequence 2, Appli | Sequence 1, Appli | Sequence 1, Appli | Description |

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> 1 KAEYKKNKHRH 11 11; Conservative

KAEYKKNKHRH 11

Matches

0,

Mismatches

0;

Indels

<u>,</u>

Gaps

0

| 45 | | 43 | 42 | 41 | 40 | 39 | 38 | 37 | 36 | 35 | 34 | 33 | 32 | 31 | 30 | 29 | 28 | 27 | 26 | 25 | 24 | 23 | 22 | 21 | 20 | 19 | 18 | 17 | 16 | 15 | 14 |
|----------------------|----------|---------------------|------------------|-------------------|------------------|------------|----------------------|----------|-----------|---------|------------------|------------------|-------------------|-------------------|----------------------|----------|--------------|------------------|--------------|------------------|---------------------|-------------------|----------------------|------------------|--------------|----------------------|--------------|----------------------|----------------------|-----------------|----|
| 37 | 37 | 37 | 37 | 37 | 37 | 37 | 37 | 37 | 37 | 38 | 38 | 38 | 39 | 39 | 39 | 39 | 40 | 40 | 40 | 41 | 41 | 41 | 44 | 44 | 44 | 44 | 44 | 44 | 44 | 44 | 4 |
| 58.7 | | 58.7 | .8 | 58.7 | | .8 | 58.7 | | 58.7 | | 60.3 | | ۲ | 61.9 | ۳ | 61.9 | ω. | ω | w | 5 | 65.1 | 5 | 69.8 | 9 | 69.8 | 9. | 9 | 69.8 | 69.8 | 9 | |
| 127 | 97 | 89 | 88 | 86 | 84 | 84 | 79 | 89 | 68 | 487 | 345 | 125 | 488 | 79 | 54 | 10 | 769 | 100 | 75 | 266 | 218 | 217 | 899 | 218 | 216 | 205 | 201 | 160 | 73 | 89 | |
| 17 | | 14 | 17 | 15 | 14 | 14 | 15 | 14 | 10 | 15 | 15 | 17 | 16 | 17 | 17 | 10 | 15 | 17 | 15 | 16 | 15 | 17 | 16 | 17 | 15 | 17 | 15 | 15 | 17 | 17 | ļ |
| US-10-425-115-191644 | 25-300-9 | US-10-029-386-29235 | 425-115-3600 | -10-424-599-23499 | US-10-023-896-88 | 0-023-896- | US-10-424-599-245751 | 0-205- | 9-764-891 | 0-282-1 | US-10-289-762-89 | -10-425-115- | -10-437-963-17882 | -10-425-115-32633 | US-10-425-115-198721 | -09-572- | -10-342-844- | -10-425-115- | -10-424-599- | -10-437-963-2036 | US-10-425-114-64096 | -10-425-115-21801 | US-10-437-963-122313 | -10-425-115- | -10-425-114- | US-10-425-115-357812 | -10-425-114- | US-10-424-599-249584 | US-10-425-115-324738 | 0-425-115-34363 | |
| e 191 | 9 | Sequence 29235, A | Sequence 360031, | e 234 | e 88, | æ | e 24575 | e 375, 🏞 | O | e 5151 | O | Sequence 218016, | Sequence 178827, | Ø | e 198721, | e 845 | æ | Seguence 200681, | æ | e 20361 | | | | Sequence 313121, | e 68080 | Sequence 357812, | Φ | Ф | e 32 | e 3436 | 1 |

ALIGNMENTS

US-09-269-533A-1

Sequence 1, Application US/09269533A

Patent No. US20020147304A1

GENERAL INFORMATION:

APPLICANT: University of Strathclyde
APPLICANT: University of Strathclyde
APPLICANT: Baillie, George

TITLE OF INVENTION: No. US20020147304A1-Naturally Occurring Lipoprotein Particle
FILE REFERENCE: P07885US
CURRENT APPLICATION NUMBER: US/09/269,533A
CURRENT FILING DATE: 1999-06-01
PRIOR APPLICATION NUMBER: PCT/GB97/02610
PRIOR APPLICATION NUMBER: GB 9620153.8
PRIOR FILING DATE: 1997-09-25
PRIOR FILING DATE: 1996-09-27
NUMBER OF SEQ ID NOS: 7
SOFTWARE: PatentIn version 3.0 ORGANISM: Artificial Sequence
PEATURE:
NAME/KEY: misc_feature
LOCATION: ()...()
OTHER INFORMATION: Apo B binding site sequence
US-09-269-533A-1 Query Match Best Local 9 ENGTH: Local Similarity 100.0%; Score 63; DB 9; 100.0%; Pred. No. 0.0015; Length 11;

RESULT 2 US-10-657-404A-1

Sequence 1, Application US/10657404A Publication No. US20040235730A1 GENERAL INFORMATION:

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RESULT 4
US-10-333-313-5
                                                                   밁
                                                                                                                                                               ) OTHER INFORMATION: oligopeptide
                                                                                                                     Matches
                                                                                                                                            Query Match
                                                                                                                                                                                                            APPLICANT: Narvanen, Outi
APPLICANT: Narvanen, Outi
APPLICANT: Via-Herttuala, Seppo
FILE REFERENCE: GJB-6363
CURRENT FILING DATE: C0JB-6363
CURRENT FILING DATE: 2003-01-15
PRIOR APPLICATION NUMBER: PCT/GB01/03212
NUMBER OF SEC ID NOS: 5-07-18
SOFTWARE: Patentin Version 3.1
FLENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Halbert, Gavin

APPLICANT: APPLICANT: Owens, Moira

APPLICANT: Deallie, George

FILE REFERENCE: PO7885US-CIP

CURRENT APPLICATION NUMBER: US/10/657,404A

PRIOR APPLICATION NUMBER: PCT/GB97/02610

PRIOR APPLICATION NUMBER: PCT/GB97/02610

PRIOR APPLICATION NUMBER: PCT/GB97/02610

PRIOR APPLICATION NUMBER: GB 9620153.8

PRIOR FILING DATE: 1997-09-25

I PRIOR FILING DATE: 1996-09-27

SOFTWARE: PSGO ID NOS: 9

I SOFTWARE: Patentin version 3.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-333-313-2
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                                                                                                                                                                                                                                                                                                                                                                                                               Publication US/10333313
Publication No. US20040091934A1
GENERAL INFORMATION:
APPLICANT. Y-
                                                                                                                                                                                                      LENGTH: 20
TYPE: PRT
ORGANIAM: Artificial Sequence
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                     Local s
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME/KRY: misc feature
OTHER INFORMATION: Apo B binding site sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH: 11
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: University of Strathclyde
APPLICANT: Halbert, Gavin
                                                                          1 KAEYKKNKHRH 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity 100.0%; Score 63; DB 17; es 11; Conservative 0; Mismarches
                                                                                                     Similarity 90.9
                                                KAQYKKNKHRH 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 KAEYKKNKHRH 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 KAEYKKNKHRH 11
                                                                                                  95.2%; Score 60; DB 15; Length 20; 90.9%; Pred. No. 0.008;
                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
                                                                                     Indels
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                                                                             Gaps
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CURRENT APPLICATION NUMBER: US/10/741,601
CURRENT FILING DATE: 2003-12-22
NUMBER OF SEQ ID NOS: 26415
SEQ ID NO 431
LENGTH: 3000
TYPE: PRT
ORGANISM: Homo sapiens
US-10-741-601-431
Sequence 128, Application US/09870759
Patent No. US20020177551A1
APPLICANT: TERMAN, David S
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR TREATMENT OF NEOPLASTIC DISEASE FILE REFERENCE: 870759
FULLE REFERENCE: 870759
FULLE REFERENCE: 107059
CURRENT PELICATION NUMBER: US/09/870,759
FULNES TILING DATE: 2002-01-14
PRIOR APPLICATION NUMBER: US 60/208,128
PRIOR SPELICATION NUMBER: US 60/208,128
PRIOR SPELICATION NUMBER: US 60/208,128
PRIOR SPELICATION NUMBER: US 60/208,128
PRIOR PRIOR SPENCE: 2000-05-30
PRIOR FILING DATE: 2000-05-30
PRIOR FILING DATE: 2000-05-30
PRIOR FILING DATE: 2000-05-30
PRIOR SPENCE: US/09/870,759
                                                                                                                                                                                                                               US-09-870-759-128
                                                                                                                                                                                                                                                        RESULT 6
                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 90.9
10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-741-601-431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 431, Application US/10741601
Publication No. US20040166519A1
GENERAL INFORMATION:
APPLICANT: CARGILL, Michele et al.
TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
FILE REFERENCE: CL001500
CIPERENT ADDITION: STEMOSIS, METHODS OF DETECTION AND USES THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              뮍
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Best Local Similarity 90.5%
10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION NUMBER: PCT/GB01/03212
NUMBER OF SEQ ID NOS: 5
SEQ ID NO 5
LENGTH; 24
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 5, Application US/10333313

GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Narvanen, Outi
APPLICANT: Yla-Herttuala, Seppo
TITLE OF INVENTION: Peptides and Their Use in Assays for Cardiovascular Disease
CURRENT APPLICATION NUMBER: US/10/333,313
CURRENT APPLICATION NUMBER: 2003-01-15
CURRENT APPLICATION NUMBER: 2003-01-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OTHER INFORMATION: oligopeptide
                                                                                                                                                                                                                                                                                         2126 KAQYKKNKHRH 2136
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                                                                                                                                                                                                                                                                                                                         1 KAEYKKNKHRH 11
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90.9%;
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90.9%;
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0.0096;
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RESULT 7
US-09-802-640-32
; Sequence 32, Appl
; Publication No. (
                                                                                                                                                                                     US-09-751-708A-128

Sequence 128, Application US/09751708A

Publication No. US20030157113A1

GENERAL INFORMATION:
APPLICANT: TERMAN, David S
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR TREATMENT OF NEOPLASTIC DISEASE
FILE REFERENCE: 751708
CURRENT APPLICATION NUMBER: US/09/751,708A
CURRENT APPLICATION NUMBER: US/09/751,708A
CURRENT FILING DATE: 2002-10-15
PRIOR APPLICATION NUMBER: US 60/173,371
PRIOR FILING DATE: 1999-12-28
NUMBER OF SEQ ID NOS: 166
SOFTWARE: Patentin version 3.1
SEQ ID NO 128
SEQ ID NO 128
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; ORGANISM: Homo sapien
US-09-802-640-32
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; ORGANISM: Homo sapiens
US-09-870-759-128
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 90.>
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SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 32
                                                               Matches
                                                                             Query Match
Best Local Similarity
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                                                                                                                          TYPE: PRT
ORGANISM: Homo sapiens
-09-751-708A-128
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE OF INVENTION: GENES AND POLYMORPHISMS ASSOCIATED WITH TITLE OF INVENTION: CARDIOVASCULAR DISEASE AND THEIR USE FILE REFERENCE: 24736-2048
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION NUMBER: US/09/802,640 CURRENT FILING DATE: 2001-03-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Braun, Andreas
APPLICANT: Bonsal Aruna
APPLICANT: Kleyn Patrick
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3174 KAQYKKNKHRH 3184
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                            KAEYKKOKHRH 11
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                                                               Conservative
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90.9%;
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Pred. No. 1.6;
1; Mismatches
                                                            Score 60; DB
Pred. No. 1.6;
1; Mismatches

    Mismatches

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Pred. No.
                                                                                            DB 10;
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RESULT 11
US-10-741-601-433
; Sequence 433, Application US/10741601
; Publication No. US20040166519A1
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Best Local Similarity
Marches 10; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; TYPE: PRT ; ORGANISM: Homo sapiens US-10-741-601-432
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US-10-741-601-432
(Sequence 432, Application US/10741601
Publication No. US20040166519A1
GENERAL INFORMATION:
APPLICANT: CARGILL, Michele et al.
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GENERAL INFORMATION:
APPLICANT: CARGILL, Michele et al.
APPLICANT: CARGILL, Michele et al.
TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
TITLE OF INVENTION: STENOSIS, METHODS OF DETECTION AND USES THEREOF
FILE REFERENCE: CL001500
CURRENT PELLCATION NUMBER: US/10/741,601
CURRENT FILING DATE: 2003-12-22
NUMBER OF SEQ ID NOS: 26415
SOFTWARE: FastSEQ for Windows Version 4.0
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SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 432
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CURRENT APPLICATION NUMBER: US/10/741,601
CURRENT FILING DATE: 2003-12-22
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APPLICANT: Bansal, Aruna
APPLICANT: Kleyn, Patrick
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GENETIC POLYMORPHISMS ASSOCIATED WITH
STENOSIS, METHODS OF DETECTION AND USES THEREOF
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90.9%;
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90.9%;
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; Pred. No. 1.6;
1; Mismatches
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SEQ ID NO 433 LENGTH: 4563

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APPLICATION NUMBER: US 60/406,597
PRIOR APPLICATION NUMBER: US 60/406,597
PRIOR PLING DATE: 2002-08-28
PRIOR APPLICATION NUMBER: US 60/406,697
PRIOR PLING DATE: 2002-08-29
PRIOR PLING DATE: 2002-08-29
PRIOR PLING DATE: 2002-08-29
PRIOR PLING DATE: 2002-08-36
PRIOR PLING DATE: 2002-08-29
PRIOR PLING DATE: 2002-08-29
PRIOR APPLICATION NUMBER: US 60/406,697
PRIOR APPLICATION NUMBER: US 60/406,750
PRIOR APPLICATION NUMBER: US 60/406,750
PRIOR APPLICATION NUMBER: US 60/415,310
PRIOR APPLICATION NUMBER: US 60/415,310
PRIOR APPLICATION NUMBER: US 60/415,310
PRIOR PRIING DATE: 2002-10-01
PRIOR PRIING DATE: 2002-10-01
PRIOR PRIING DATE: 2002-10-01
PRIOR PRIING DATE: 2002-10-02
PRIOR PRIING DATE: 2002-10-05
PRIOR PRIING DATE: 2002-10-02
PRIOR PRIING DATE: 2002-10-02
PRIOR PRIING DATE: 2002-10-02
PRIOR PRIING DATE: 2003-01-09
                                                                                                                                                                                                                                                                                                                                           RESULT 13
US-10-115-072-14
APPLICANT: NILSON, JAN
APPLICANT: NILSON, JAN
APPLICANT: SHAH, PREDIMAN K.
TITLE OF INVENTION: PEPTIDE-BASED IMMUNIZATION THERAPY FOR TREATMENT OF
TITLE OF INVENTION: ATHEROSCLEROSIS AND DEVELOPMENT OF PEPTIDE-BASED ASSAY
TITLE OF INVENTION: FOR DETERMINATION OF IMMUNE RESPONSES AGAINST OXIDIZED
CURRENT APPLICATION NUMBER: US/10/115,072
CURRENT APPLICATION NUMBER: US/10/115,072
PRIOR APPLICATION NUMBER: 60/281,410
PRIOR FILING DATE: 2001-05-04
PRIOR FILING DATE: 2001-05-04
PRIOR PRIOR APPLICATION NUMBER: SE 0101272-7
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                                                                                                                                                                                                                                                                                               Sequence 14, Appropriate Publication No.
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SEQ ID NO 124
LENGTH: 4563
TYPE: PRT
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US-10-741-601-433
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Best Local Similarity 90.5
Matches 10; Conservative
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No._US20030105003A1
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o. US20040214783A1
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90.9%;
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Pred. No.
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APPLICANT: NILSSON, JAN
APPLICANT: NILSSON, ROLAND
APPLICANT: CARLSSON, JENNY
APPLICANT: ERGTSON, JENNY
APPLICANT: STRANDBERG, LEIF
TITLE OF INVENTION: TREATMENT OF ATHEROSCLEROSIS
CURRENT APPLICATION UNMERS: US/10/679,032
CURRENT APPLICATION UNMERS: US/10/679,032
NUMBER OF SEQ ID NOS: 79
CURRANTH: 20
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: Synthetic
Sequence 333636, Application US/10425115
Publication No. US20040214272A1
EDENBRAL INFORMATION:
APPLICANT: La ROSa, Thomas J.
APPLICANT: Kovalic, David K.
APPLICANT: Cabo, Yihua
APPLICANT: Cabo, Yongwei
TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With
FILE REFERENCE: 38-21 (53222)B
CURRENT FILING DATE: US/10/425,115
NUMBER OF SEQ ID NOS: 369326
SEQ ID NO 343636
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US-10-425-115-343636
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US-10-679-032-52
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Best Local (
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PRIOR APPLICATION NUMBER: SE 01
PRIOR FILING DATE: 2001-09-11
NUMBER OF SEQ 1D NOS: 38
SOFTWARE: PatentIn Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 52, Application US/10679032
Publication No. US20040202653A1
                                                                                                                                                                                                                                                                                                                                                                                                    OTHER INFORMATION: Description of Artificial Sequence: Synthetic
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NUMBER: SE 0103754-8
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| | C;Date: 28-Dec-1987 #sequence revision 28-Dec-1987 #text change 09-Jul-2004 |
| | C;Accession: A27850; A25679; A25263; A25267; A25266; A24320; A24684; A23817; A25774; A26 |
| | 4452; I61909; I59510; I39474; I39469; I84624; I37179; PS0058 |
| | R;Ludwig, E.H.; Blackhart, B.D.; Pierotti, V.R.; Caiati, L.; Fortier, C.; Knott, T.; Sco |
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| | A; Title: DNA sequence of the human apolipoprotein B gene. |
| | A;Reference number: A27850; MUID:88003974; PMID:3652907 |
| | A;Accession: A27850 |
| | A; Molecule type: DNA |
| ance to have a | A;Residues: 1-617,'A',619-1929,'F',1931-3318,'D',3320-3426,'T',3428-3431,'Q',3433-3731,' |
| sult being printed, | A;Cross-references: UNIPROT:P04114; UNIPROT:P78482; UNIPROT:P78479; UNIPROT:Q9UMNO; UNIP |
| ribution. | R;Cladaras, C.; Hadzopoulou-Cladaras, M.; Nolte, R.T.; Atkinson, D.; Zannis, V.I. |

431,'Q',3433-3731,' NIPROT:Q9UMNO; UNIP Zannis, V.I.

EMBO J. 5, 3495-3507, 1986
A;Title: The complete sequence and structural analysis of human apolipoprotein B-100: re A;Reference number: A91058; MUID:87161758; PMID:3030729
A;Accession: A25679

A;Molecule type: mRNA
A;Residues: 1-11,15-239,'8',2541-3823,'R',3825-4563 <CLA>
A;Residues: 1-109-Asp was also found
A;Note: 1109-Asp was also found
R;Knott, T.J.; Wallis, S.C.; Powell, L.M.; Pease, R.J.; Lusis, A.J.; Blackhart, B.; McCa
Nucleic Acids Res. 14, 7501-7503, Powell and derived protes
A;Title: Complete cDNA and derived protes and derived pro

A; Molecule type: mRNA
A; Residues: 1-272; N. 274-617; A', 619-1217; B', 1219-2091; V', 2093-2364, 'T', 2366-2679, 'Q'
A; Residues: 1-272; N. 274-617; MID: g34330; PIDN: CAA28191.1; PID: g34331
A; Cross-references: GB: X04506; NID: g34330; PIDN: CAA28191.1; PID: g34331
R; Law, S.W.; Grant, S.M.; Higuchi, K.; Hospattankar, A.; Lackner, K.; Lee, N.; Brewer Jr
Proc. Natl. Acad. Sci. U.S.A. 83, 8142-8146, 1986
A; Title: Human liver apolipoprotein B-100 cDNA: complete nucleic acid and derived amino
A; Reference number: A94134; MUID: 87041416; PMID: 3464946
A; Accession: A35267

A;Molecule type: mRNA
A;Residues: 1-617,'A',619-703,'P',705-792,'R',794-1270,'S',1272-1866,'G',1868-2036,'N',214,189-4220,'M',422-4563 <LAW>
4189-4220,'M',422-4563 <LAW>
A;Note: the codons given for residues 704, 793, 1271, 2037, 2933, 3286, 3782, 4188, and R;Chen, S.H.; Yang, C.Y.; Chen, P.F.; Setzer, D.; Tanimura, M.; Li, W.H.; Gotto Jr., A.M. J. Biol. Chem. 261, 12918-12921, 1986
A;Title: The complete cDNA and amino acid sequence of human apolipoprotein B-100.
A;Reference number: A92556; MUID:87008488; PMID:3759943
A;Accession: A25266

A;Nolecule type: mRNA
A;Rolecule type: mRNA
A;Residues: 1-97,'I',99-328,'V',330-644,'I',646-918,'P',920-3318,'D',3320-3426,'T',34289-4132,'G',4134-4180',E',4182-4563 <CHE>
A;Cross-references: GB:JO2610; NID:g178803; PIDN:AAA35549.1; PID:g178804
A;Note: a total of 2366 residues were confirmed by direct sequencing of tryptic peptides
A;Note: a total of 2366 residues were confirmed by direct sequencing of tryptic peptides
A;Protter, A.A.; Hardman, D.A.; Sato, K.Y.; Schilling, J.W.; Yamanaka, M.; Hort, Y.J.; H

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A; Molecule type: mRNA
A; Molecule type: mRNA
A; Cross-references: GB: M12413; NID: 9178735; PIDN: AAA51742.1; PID: 91787365-3982,'S', 3:
R; Chen, S. H.; Habib, G.; Yang, C.Y.; Gu, Z.W.; Lee, B.R.; Weng, S.; Silberman, S.R.; Ca
Science 238, 363-366, 1987
                                                                                                                                                                                                                                                                                                                                                                      A;Cross-references: GB:M36676
R;Wei, C.F.; Chen, S.H.; Yang, C.Y.; Marcel, Y.L.; Milne, Proc. Natl. Acad. Sci. U.S.A. 82, 7265-7269, 1985
A;Reference number: A24738; MUID:86042646; PMID:2932736
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A;Molecule type: mRNA
A;Residues: 3846-4298 <SHO>
R;Pfitzner, R; Wagener, R; Stoffel, W.
Biol. Chem. Hoppe-Seyler 367, 1077-1083, 1986
A;Title: Isolation, expression and characterization of a l
A;Accession: A25572; MUID:87076044; PMID:3024665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Cross references: GB:M17367; NID:9178731; PIDN:AAAS17. R;Shoulders, C.C.; Myant, N.B.; Sidoli, A.; Rodriguez, A;Title: Molecular cloning of human LDL apolipoprotein A;Accession: A29287
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A; Restidues; 1282-2721,2742-3290,'L',3292-3336,'N',3338-3948,'F',3950-3963,'Y',3965-4180,'A; Cross-references: GB:M15421; NID:G178817; PIDN:AAA51758.1; PID:G178818
B; Chemistry 26, 5478-5486, 1987
A; Title: Structural comparison of human apolipoproteins Structural comparison of human apolipoproteins B-48 and B-100.
A; Accession: A29671; MUID:88050832; PMID:3676265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Molecule type: mRNA
Residues: 4219-4337, 'S', 4339-4563 <PFI>
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A; MOLECULE type: mRNA
A; Residues: 709-791, 'SSSWKAASHGCPHSAGD', 810-906 < DRE>
A; Cross-references: GB:K03175; NID:g178821; PIDN:AAA51759.1;
A; Cross-references: GB:K03175; Olofsson, S.O.; Bjursell, G.
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Proc. Natl. Acad. Sci. U.S.A. 82, 4983-4986, 1985
A;Title: A partial cDNA clone for human apoliprotein B.
A;Accession: A25774; MUID:85270450; PMID:3860836
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A;Residues: 485-617; A',619-1044 <LA2>
A;Cross references: GB:M12480; NID:9178791; PIDN:AAA51751.1; PID:9178792
Proc. Natl. Acad. Sci. U.S.A. 83, 1467-1471, 1986
A;Reference number: A94088; MUID:86149325; PMID:3513177

A.A.A.Ccession: A23817

A.A.Ccession: A23817

A.Mclacule type: mRNA
A;Reference number: A94088; MUID:86149325; PMID:3513177
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Title: Analysis of the human apolipoprotein B gene; co
Reference number: A91565; MUID:87191999; PMID:2883086
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alysis of cDNA clones encoding the entire B-26 region of human apolipoproteir
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RNA with an organ-specific in
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               human apolipoprotein B 100-spec
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   W.H.; Sparrow,
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A, Molecule type: protein
A;Residues: 873-892'K', 894-896 < LE1>
A;Residues: 3113, 'L', 3115-3130, 'R', 3132-3133, 'P', 3135-3136, 'R' < LE2>
A;Molecule type: protein
R;Blackhart, B.D.; Ludwig, E.M.; Pierotti, V.R.; Caiati, L.; Onasch, M.A.; Wallis Biol. Chem. 261, 15364-15367, 1986
A;Title: Structure of the human apolipoprotein B gene.
A;Title: annotation; gene structure
Biol. Chem. 4092-64; MUID:87057153; PMID:2946672
Biol. Chem. Hoppe-Seyler 368, 419-425, 1987
A;Reference number: A90715; MUID:872771140; PMID:2886136
A;Contents: annotation; gene structure
J. Riveisgraber, K.H.; Rall Jr., S.C.
A;Title: Human apolipoprotein B-100 heparin-binding sites.
A;Reference number: A92605; MUID:87280197; PMID:3301850
A;Contents: annotation: henarin hinding and disnifida home
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FBBS Lett. 170, 105-108, 170-
A.Title: Human apolipoprotein B: partial amino
A:Reference number: A22006; MUID:84208786; PMID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A;Note: Cysteines at positions 1112, 1422, 1505, 1662, R;LeBoeuf, R.C.; Miller, C.; Shively, J.E.; Schumaker, FEBS Lett. 170, 105-108, 1984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Molecule type: mRNA
A; Residues: 2169-2179 <HOS>
A; Note: the sequence shown represents the carboxyl end of apolipoprotein B-48
A; Note: the sequence shown represents the carboxyl end of apolipoprotein B-48
Ch encodes the 250K apol-48, CAA encoding 2180-Gln is substituted from the human
R; Yang, C.; Kim, T.W.; Weng, S.; Lee, B.; Yang, M.; Gotto Jr., A.M.
Proc. Natl. Acad. Sci. U.S.A. 87, 5523-5527, 1990
A; Reference number: A35783; MUID: 90319144; PMID: 2115173
A; Contents: disulfide bonds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A;Molecule type: mRNA
A;Residues: 3056-3159 <MEH>
A;Cross-references: GB:X03045; NID:928783; PIDN:CAA26850.1; PID:992960
A;Cross-references: GB:X03045; NID:928783; PIDN:CAA26850.1; PID:992960
R;Hospattankar, A.V.; Higuchi, K.; Law, S.W.; Meglin, N.; Brewer Jr.;
Biochem. Biophys. Res. Commun. 148, 279-285, 1987
A;Title: Identification of a novel in-frame translational stop codon j. A;Accession: A29659; MUID:88049670; PMID:2445342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A;Experimental source: intestine
A;Experimental source: intestine
A;Note: this mRNA from intestine includes a stop codon created by RNA editing in play
R;Mchrabian, M.; Schumakar, V.N.; Fareed, G.C.; West, R.; Johnson, D.F.; Kirchgessne
Nucleic Acids Res. 13, 6937-6953, 1985
A;Title: Human apolipoprotein B: identification of cDNA clones and characterization
A;Reference number: A24269; MUID:86041888; PMID:3903660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A;Molecule type: protein
A;Molecule type: protein
A;Residues: $1-75;101-110;129-139;158-174;197-207;276-287;298-304;306-314;526-532;538-5
36;1486-1489;1537-1556;1563-1572;1601-1610;1647-1661;1697-1724;1770-1781;1859-1897;1968
A;Note: these fragments were derived from apo48
B;Hardman, D.A.; Protter, A.A.; Schilling, U.W.; Kane, J.P.
Biochem, Biophys. Res. Commun. 149, 1214-1219, 1987
A;Title: Carboxyl terminal analysis of human B-48 protein confirms the novel mechanism;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A;Residues: 2129-2179,2181-2235 <HA2>
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A;Note: this mRNA includes the stop codon of the organ-specific mRNA for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Lype: protein
28-41,76-97,'1',99-100;175-193;206-215;239-249;259-266;357-399;455-490;512-5
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PMID:6373369
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Balla, M.A.; Lusis, A.J.
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rewer Jr., H.B.
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F.; Kirchgessner,
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apolipoprotein B - crab-eating macaque (fragment)
() Species: Macaca fascicularis (crab-eating macaque)
C; Date: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 09-Jul-2004
C; Accession: $32802
R; Pape, M.E.; Castle, C.K.; Murray, R.W.; Funk, G.M.; Hunt, C.E.; Marotti, K.R.; Melchic Biochim. Biophys. Acta 1086, 326-34, 1991
A;Title: Apo B metabolism in the cyromolgus monkey: evidence for post-transcriptional re A;Reference number: $32802; MUID:92075708; PMID:1742325
A;Accession: $32802
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S32802
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Blochem. Blophys. Ree. Commun. 137, 493-499, 1986
A; Title: Apolipoprotein B is a calcium binding protein.
A; Reference number: A90125; MUID:86242245; PMID:3087360
A; Contents: annotation; calcium binding
R; Carlsson, P.; Olofsson, S.O.; Bondjers, G.; Darnfors, C.;
Nucleic Acids Res. 13, 8813-8826, 1985
A; Title: Molecular cloning of human apolipoprotein B cDNA.
A; Reference number: 137178; MUID:86093680; PMID:3841204
A; Accession: 137180
                                                                                                                                                                                                          A; Molecule type: DNA
A; Residues: 1-269 < LAW>
                                                                                                                                                                                                                                                J. Lipid Res. 31, 1109-1120, 1990
A;Title: A cross-species comparison of the A;Reference number: A60950; MUID:90324804; A;Accession: C60950
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C:Species: Mesocricetus auratus (golden hamster)
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A; Residues: 1-596 < PAP>
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                                                                                            Query Match
Best Local :
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  KAQYKKNRDRH
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19
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72.7%;
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81.8%;
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Pred. No. 0.06
1; Mismatches
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                                                                                        Score 48; DB 2
Pred. No. 0.56;
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0.063;
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RESULT 4

Local Similarity

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C;Species: Sus scrofa domestica (domestic pig)
C;Species: Sus scrofa domestica (domestic pig)
C;Date: 31-Mar-1992 #sequence_revision 31-Mar-1992 #text_change 09-Jul-2004
C;Accession: JT0382; I46567; T46568
R;Maedda, N.; Ebert, D.L.; Doers, T.M.; Newman, M.; Hasler-Rapacz, J.; Attie, Gene 70, 213-229, 1988
A;Title: Molecular genetics of the apolipoprotein B gene in pigs in relation A;Reference number: JT0382; MUID:89108006; PMID:2905687
A;Accession: JT0382; MUID:89108006; PMID:2905687
A;Accession: JT0382; MUID:89108006; PMID:2905687
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A; Molecule type: DNA
A; Residues: 1-1778 < MAE>
A; Residues: 1-1778 < MAE>
A; Cross-references: UNIPROT: Q29020; UNIPROT: Q29433
R; Maeda, N.; Ebert, D.L.; Doers, T.M.; Newman, M.;
Gene 69, 213-229, 1988
A; Title: Molecular genetics of the apolopoprotein E
A; Reference number: 146567
A; Accession: 146567
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A;Note: this is a revision to the sequence from reference JH0101

R;Smith, T.J.; Hautamaa, D.; Maeda, N.

Gene 87, 309-310, 1990
                                                                      A;Introns: 39/3; 88/3; 159/2; 238/3; 1133/1; 1171/2; 1232/3
A;Note: the list of introns may be incomplete
C;Superfamily: apolipoprotein B
C;Superfamily: apolipoprotein B
C;Keywords: atherosclerosis; cholesterol metabolism; LDL; lipid binding;
                                                                                                                                                                                                                              A;Residues: 239-1778 <MA3>
A;Cross-references: GB:M22647; NID:g164367; PIDN:AAA30997.1; PID:g164370
C;Comment: Apolipoprotein B is the predominant protein component of the low-density lipo;
                                                                                                                                                                                                                                                                                                                                                              A;Molecule type: DNA
A;Residues: 1-8,'S',10-238 <MA2>
A;Residues: 1-8,'S',10-238 <MA2>
A;Cross-references: GB:M22646; NID:g164366; PIDN:AAA30996.1;
A;Accession: I46568
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C;Keywords: atherosclerosis; calcium;
F;435-445/Region: receptor binding
F;646-656/Region: receptor binding
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C;Species: Mesocricetus auratus (golden hamster)
C;Date: 17-Apr-1993 #sequence_revision 17-Apr-1993 #text_change 09-Jul-2004
C;Accession: JH0102
                                                                                                                                                                                                                                                                                                             A;Status: preliminary; translated from GB/EMBL/DDBJA;Molecule type: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Status: translated from GB/EMBL/DDBJ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A;Title: Sequence of the putative low-density lipoprotein receptor-binding regions A;Reference number: JH0101; MUID:90236327; PMID:2332175 A;Contents: annotation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Accession: JH0102
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8; Conserv
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72.7%;
76.2%;
72.7%;
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Score 48;
Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              cholesterol metabolism; chylomicron; glycoprotein;
  DB 2;
3.3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  M.; Hasler-Rapacz,
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                        Length 1778;
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Matches

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R;Law, A.; Scott, J.
J. Lipid Res. 31, 1109-1120, 1990
A;Title: A cross-species comparise
A;Reference number: A60950; MUID:
   A; Accession:
                                                                   apolipoprotein B-100 - rabbit (fragment)
C:Species: Oryctolagus cuniculus (domestic rabbit)
C:Date: 31-Dec-1993 #sequence_revision 09-Sep-1994 #text_change
                                                                                                                                            RESULT 8
A60950
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                                                                                                                                                                                                                                                                                                                                                                 A;Molecule type: mRNA
A;Residues: 1-274 <LAW>
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J. Lipid Res. 31, 1109-1120, 1990
A;Title: A cross-species comparise
A;Reference number: A60950; MUID:
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C;Species: Rattus norvegicus (Norway rat)
C;Date: 31-Dec-1993 #sequence_revision 09-Sep-1994 #text_change
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             R;Purtell, C.; Maeda, N.; Ebert, D.L.; Kaiser, M.; Lund-Katz, S.; Sturley, S.L.; Kodo; A;Title: Nucleotide sequence encoding the carboxyl-terminal half of apolipoprotein B A;Accession: I46569; MUID:94014802; PMID:8409766
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: DNA
A;Residues: 1-2629 <PURS
A;Gessidues: 1-2629 <PURS
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C; Superfamily:
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Best Local (
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;Superfamily: apolipoprotein B
;Keywords: atherosclerosis; calcium; cholesterol metabolism; chylomicron;
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C;Species: Sus scrofa domestica (domestic pig)
C;Date: 21-Feb-1997 #sequence_revision 21-Feb-1997 #text_change 09-Jul-2004
C;Accession: 146569
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Best Local
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comparison of the apolipoprotein 0; MUID:90324804; PMID:2373961
                                                                                                                                                                                                                                                                     71.4%;
63.6%;
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                                                                                                                                                                                                                                                                                                                                                                                            comparison of the apolipoprotein B domain that binds to the LDI
50; MUID:90324804; PMID:2373961
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72.7%;
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Pred. No.
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Pred. No. 4.7;
2; Mismatches
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4.7;
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        domain that binds
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     to the LDI
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hypothetical protein At2927670 [imported] - Arabidopsis thaliana C;Species: Arabidopsis thaliana (mouse-ear cress) C;Date: 02-Feb-2001 #sequence_revision 02-Feb-2001 #text_change 09-Jul-2004 C;Accession: E84675 Rounsley, S.D.; Shea, T.P.; Benito, M.I.; Town, C.D.; P. M.; Koo, H.; Moffat, K.S.; Cronin, L.A.; Shen, M.; VanAken, S.E.; Umayam, L. euss, D.; Niorman, M.C.; White, O.; Eisen, J.A.; Salzberg, S.L.; Fraser, C. Nature 402, 761-768, 1999
                                                                                                                                                                                                                RESULT 10
E84675
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                                                                                                                                                                                                                                                                                                                                                                                                                      C.Superfamily: apolipoprotein B
C;Keywords: atherosclerosis; calcium; cholesterol metabolism; chylomicron;
P;435-445/Region: receptor binding
P;646-656/Region: receptor binding
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A;Molecule type: mRNA
A;Residues: 427-531,'S',533-700 <LAW>
C;Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A:Gene: MGI:Apob
A:Cross_references: MGI:88052
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A;Title: A cross-species comparison of the A;Reference number: A60950; MUID:90324804;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A;Molecule type: DNA
A;Residues: 1-784 <SMI>
A;Cross-references: UNIPROT:Q61314; GB:M35186
R;Smith, T.; Hautamaa, D.; Maeda, N.
submitted to the EMBL Data Library, May 1989
A;Reference number: S33128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       C;Species: Mus musculus (house mouse)
C;Date: 17-Apr-1993 #sequence revision 17-Apr-1993 #text_change
C;Accession: JH0101; S33128; D60950
R;Smith, T.J.; Hautamaa, D.; Maeda, N.
Gene 87, 309-310, 1990
A;Title: Sequence of the putative low-density lipoprotein recept
A;Reference number: JH0101; MUID:90236327; PMID:2332175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A;Molecule type: DNA A;Residues: 1-531,'S',533-784 <SM2>
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                                                                                                                                                                                                                                                                                                                                                                               Matches
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A;Residues: 1-274 <LAW>
A;Residues: 1-274 <LAW>
A;Residues: 1-274 <LAW>
A;Residues: 1-274 <LAW>
A;Rosidues: 1-274 <LAW>
A;Rosidues: authors translated the codon GAT for residue 155 as His
C;Superfamily: apolipoprotein B
C;Keywords: atherosclerosis; calcium; cholesterol metabolism; chylomicron; glycoprotein,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Status: preliminary
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Best Local :
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                                S.; Rounsley, S.D.; Shea, T.P.; Benito, M.I.; Town, C.D.; Fujii, C.Y. fat, K.S.; Cronin, L.A.; Shen, M.; VanAken, S.E.; Umayam, L.; Tallon, J., W.C.; White, O.; Eisen, J.A.; Salzberg, S.L.; Fraser, C.M.; Venter,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity 7; Conserv
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                 chromosome
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Pred. No. 11;
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2 of the plant Arabidopsis thaliana
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4.3;
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TATA-binding protein-associated factor II - fruit fly (Drosophila melanogaster) (;Species: Drosophila melanogaster C;Date: 02-Aug-1994 #sequence_revision 02-Aug-1994 #text_change 09-Jul-2004 C;Accession: A54063 R;Verrijzer, C.P.; Yokomori, K.; Chen, J.L.; Tjian, R. Science 264, 933-941, 1994 A;Title: Drosophila TAF-II 150: similarity to yeast gene TSM-1 and specific bind A;Reference number: A54063; MUID:94233377; PMID:8178153 A;Accession: A54063
                                                                                                                                                                                            Curr. Top. Microbiol. Immunol. 154, 125-169, 1990
A;Title: Analysis of the protein-coding content of the sequence (A;Reference number: S09749; MUID:90269039; PMID:2161319
A;Recession: S09828
A;Status: nucleic acid sequence not shown; translation not shown A;Molecule type: DNA
A;Residues: 1-102 cCHE>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A;Molecule type: mRNA
A;Residues: 1-1213 <VER>
A;Cross-references: UNIPROT:Q24325; GB:X79243;
श
                                                                                                               A;Cross-references: UNIPROT:P17148; EMBL:X17403; NID:g59591; PIDN:CAA35380.1; PID:g17808
A;Note: this sequence was submitted to the EMBL Data Library, December 1989
A;Note: this reading frame extends between two stop codons and does not begin with a sta
C;Superfamily: cytomegalovirus tegument protein
                                                                                                                                                                                                                                                                                                                                    hypothetical protein UL65 - human cytomegalovirus (strain AD169)
C;Species: human cytomegalovirus, human herpesvirus 5
A;Note: host Homo sapiens (man)
C;Date: 07-Sep-1990 #sequence_revision 07-Sep-1990 #text_change 09-Jul-2004
C;Accession: S09828
R;Chee, M.S.; Bankier, A.T.; Beck, S.; Bohni, R.; Brown, C.M.; Cerny, R.; Horsnell,
M.; Barrell, B.G.
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A; Map position:
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A;Accession: E84675
A;Status: preliminary
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-221 <STO>
A;Residues: 1-221 <STO>
A;Cross-references: UNIPROT:Q9ZUW9; GB:AE002093; NID:g3860265; PIDN:AAC73033.1; GSPDB:GN
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Map position: 2
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-references: FlyBase:FBgn0011836
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RESULT 14
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$44617
$544617
$C50C3.11 protein - Caenorhabditis elegans
$C;Species: Caenorhabditis elegans
$C;Date: 20-Feb-1995 #sequence_revision 20.
$C;Accession: $44617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       protein F15A4.1 [imported] - Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Date: 10-May-2001 #sequence_revision 10-May-2001 #text_change 09-Jul-2004
C;Accession: H88337
submitted to the EMBL Data A; Description: Sequence of A; Reference number: $44627
                                                          R; Favello, A.D
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A; Residues: 1-452 < STO>
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A; Note: published errata appeared in Science 283, 35, 1999; Science 283, 2103, 1999; and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         R;anonymous, The C. elegans Sequencing Consortium. Science 282, 2012-2018, 1998
A;Tille: Genome sequence of the nematode C. elegans: a platform for investigating biolog A;Reference number: A75000; MUID:99069613; PMID:9851916
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A;Accession: T20958
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C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 09-Jul-2004
C;Accession: T20958
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A;Accession: $44617
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A;Cross: reference: UNIPROT:P34374; EMBi::L14433; NID:9289649; PID:9289650
A;Introns: 24/2; 87/3; 175/1; 259/1; 290/3; 346/3; 460/3; 538/3
Query Match
Scartches: 7, Conservative
2; Mismatches: 1; Indels: 0; Gaps: 0;
A;Cross: pred: No. 54,
Mismatches: 1; Indels: 0; Gaps: 0;
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Search completed: January 12, 2005, 13:31:56

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SEQUENCE OF 1-291 FROM N.A.

MEDLINE=86149325; PubMed=3513177,

Protter A.A., Hardman D.A., Schilling J.W.,

Chen G.C., Kirsher S.W., McEnroe G., Kane J.

"Isolation of a cDNA clone encoding the amir
                                                                         Mahley R.W., Scott J.,
"Human apolipoprotein B:
of gene expression, and c
Science 230:37-43(1985).
                                                                                                                 Knott T.J., Rall S.C. Jr., In
Levy-Wilson B., Powell L.M., I
Priestley L.M., Robertson E.,
                                                                                                                                                                                 Nucleic [9]
                                                                                                                                                                                                                      SEQUENCE OF 1937-2018 AND 3811-4334 FROM MEDLINE=86093680; PubMed=3841204; Carlsson P., Olofsson C.
                                                                                                                                                                                                                                                                                                                                                                                                            Zannis V.I.;
"The complete sequence a B-100: relationship between EMBO J. 5:3495-3507(1986)."
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                                                                                                                                                                              "Molecular cloning of human apolipoprotein
Nucleic Acids Res. 13:8813-8826(1985).
                                                                                                                                                                                                               Bjursell
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                                                                                                                                                                                                                                                                 Nucleic
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Zannis V.I.
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MEDLINE=87161758; PubMed=3030729;
Cladaras C., Hadzopoulou-Cladaras
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           "Human liver apolipoprotein B-100 cDNA: complete derived amino acid sequence.";
Proc. Natl. Acad. Sci. U.S.A. 83:8142-8146 (1986)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE=87041416;
                                                                                                                                                                                                                                                                                                                                         QUENCE OF 709-906 FROM N.A.
DILINE=85270450; PubMed=3860836;
eb S.S., Motulsky A.G., Albers J.J.;
partial cDNA clone for human apolipoprotein B
oc. Matl. Acad. Sci. U.S.A. 82:4983-4986(1985)
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Knott T., Sco
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B., McCarthy B.
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PubMed=2994225;
S.C. Jr., Innerarity T.L., Jacobson S.F.
owell L.M., Pease R.J., Eddy R., Nakai
obertson E., Rall L.B., Betsholtz C., g
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PubMed=3903660;
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.M., Higuchi K.,
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l localization.
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    amino-terminal
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Y., Mendiaz E
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Huang L.-S., Gavish D., Breslow J.L.; "Sequence polymorphism in the human apob Nucleic Acids Res. 18:5922-5922(1990).
                              VARIANT LEU-2739.
MEDLINE=91016974;
Huang L.-S., Gavie
                                                                                              defective
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Soria L.F., Ludwig
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                                                                                                                                                                          "Detection by denaturing gradient gel
polymorphism in the apolipoprotein B c
Hum. Genet. 86:91-93 (1990)
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MEDLINE=91071750; PubMed=1979313;
Navajas M., Laurent A.-M., Moreel
Cunny G., Cambien F., Roizes G.;
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MEDLINS=86242245; PubMed=3087360;

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Levy-Wilson B., Scott J.;
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human apollopprotein B.";
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Proc. Natl. Acad.
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e apolipoprotein p
tl. Acad. Sci. U.:
                                     PubMed=2216805;
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g E.H., Clarke H.R.G.,
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[20] VARIANT FDB CYS-3558.

J.A.,

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               SEQUENCE FROM N.A.

Rieder M.J., Carrington D.P., da Ponte S.H., Has Rieder M.O., Kuldanek S.A., Rajkumar N., Toth E. Nickerson D.A.;

Nickerson D.A.;

Submitted (JUN-2003) to the EMBL/GenBank/DDBJ da EMBL; AY324608; AAP72970.1;

GO; GO:0005319; F:lipid transporter activity; IE GO; GO:0006869; F:lipid transport; IEA.

InterPro; IPR009454; DUF1081.
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Pullinger C.R., Hennessy L.K., Chatterton J.E., Liu W., Love J. Mendel C.M., Frost P.H., Malloy M.J., Schumaker V.N., Kane J.P. Mendel C.M., Island-defective apolipoprotein B. Identification of mutation that decreases LDL receptor binding affinity.";
J. Clin. Invest. 95:1225-1234(1995).
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Mammalia; Eutheria;
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Leren T.P., Bakken K.S., Hoel V., Hjermann I.,
"Screening for mutations of the apolipoprotein
hypocholesterolemia.";
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Krempf M., Giraudet P., Junien C., Boileau C.;
"Familial ligand-defective apolipoprotein B-100:
detection of the ARG3500---GLN and ARG3531---CYS
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MEDLINE=97403938; PubMed=9259199;
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                                                                                                                                                                                                                                                                     NCBI_TaxID=9606;
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Q7YQR5;
                                      MEDLINE=92075708; PubMed=1742325; Page M.E., Castle C.K., Murray R.W., Marotti K.R., Melchior G.W.; Mapo B metabolism in the cynomolgus transcriptional regulation.";
                                                                                                                                                                                                                                                                                                                                           Q28473;
01-NOV-1996 (TrEMBLrel. 01,
01-NOV-1996 (TrEMBLrel. 01,
01-JUN-2003 (TrEMBLrel. 24,
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Bukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Mammalia; Eutheria; Primates; Platyrrhini; Cebidae;
NCBI_TaxID=57176;
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Pfam; PF01347; Vitellogenin_N;
SMART; SM00538; LPD_N; 1.
                                                                                                                                                                                                             Cercopithecinae;
NCBI_TaxID=9541;
                                                                                                                                                                                                                                                          Apolipoprotein B (Fragment).
Macaca fascicularis (Crab eating macaque) (Cynomolgus monk
Macaca fascicularis (Crab eating macaque) (Cynomolgus monk
Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Eutele
Mammalia; Butheria; Primates; Catarrhini; Cercopithecidae;
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MEDILINE=22761261; PubMed=12878460;

Amrine-Madsen H., Koepfli K.-P., Wayne R.K.,

Amrine-Mylogenetic marker, apolipoprotein B,

"A new phylogenetic marker apolipoprotein B,

evidence for eutherian relationships.";

Mol. Phylogenet. Evol. 28:225-240(2003).
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01-OCT-2003 (TrEMBLrel. 25, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
                      Biochim.
                                                                                                                                                  SEQUENCE FROM N.A. TISSUE=Liver;
                                                                                                                                                                                                                                                                                                                                                                                                                                 Q28473
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Lipoprotein.
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SEQUENCE 4
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414 AA;
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Pred. No. 0.36;
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Pred. No. 0.
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                                                                                                         Funk G.M.,
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SEQUENCE FROM N.A.

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RESULT 7
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                                                                                                           QYRI4;
QYRI4;
01-OCT-2003 (TrEMBLrel. 25, Created)
01-OCT-2003 (TrEMBLrel. 25, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
Apolipoprotein B (Fragment)
Apolipoprotein B (Fragment)
Rhinolophus creaghi
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia, Eutheria; Chiroptera; Microchiroptera; Rhinolophidae;
Rhinolophinae; Rhinolophus.
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Lipoprotein.
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EMBL; AF548409; AAP97365.1;
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Amrine-Madsen H., Koepfli K.-P., Wayne R.K., (
"A new phylogenetic marker, apolipoprotein B,
evidence for eutherian relationships.";
Mol. Phylogenet. Evol. 28:225-240(2003).
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Tubulidentata; Orycteropodidae; Orycteropus.
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Name=apoB-100;
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Submitted (FEB-1992) to the EMBL/GenBank/DDBJ EMBL, X15737; CAA33755.1; -...
PIR; S32802; S32802.
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                                                                                                                                                                                                                                                                                                            PRELIMINARY;
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596 AA;
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  PubMed=12878460;
Koepfli K.-P., Wayne R.K.,
ic marker, apolipoprotein B,
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1 66757 MW;
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Pred. No. 0.
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Name=apoB-100;
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SEQUENCE 30.
                                                                                                                                                                                                                                                    NCBI_TaxID=55050;
                                                                                                                                                                                                                                                                                 Ictonyx striatus (striped polecat).
Ictonyx striatus (striped polecat).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Carnivora; Fissipedia; Mustelidae; Mustelinae;
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MEDILINB-22761261; PubMed=12878460;

Amrine-Madsen H., Koepfli K.-P., Wayne R.K.,

"A new phylogenetic marker, apolipoprotein B,

evidence for eutherian relationships.";

Mol. Phylogenet. Evol. 28:225-240(2003).

EMBL; AF548412; AAP97368.1; -.
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Q7YQP9;
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Bchinops telfairi (Lesser hedgehog tenrec).
Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia; Eutheria, Insectivora, Tenrecidae, Tenrecinae, Echinops
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Apolipoprotein B 100
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Mol. Phylogenet. Evol. 28:225-240(2003)
EMBL; AY243371; AAP50759.1; -.
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9; Conservative
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9; Conserv
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(TrEMBLrel. 25, Last sequence update)
(TrEMBLrel. 25, Last annotation update)
en B 100 (Fragment).
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Pred. No. 1.2;
1; Mismatches
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Pred. No. 1.2;
1; Mismatches
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01-OCT-2003
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Q7YQN9;
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01-OCT-2003 (TrEMBLrel. 25, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
Apolipoprotein B 100 (Fragment).
NameapoB-100;
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                      MEDLINE-22761261; PubMed-12878460; Amrine-Madeen H., Koepfli K.-P., Wayne R.K. "A new phylogenetic marker, aprocessing evidence for eutherian relationships."; Mol. Phylogenet. Evol. 28:225-240(2003). EMBL; AF548424; AAP97380.1; -.
                                                                                                                                                                                                                                                                                                         Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                            01-OCT-2003 (TrEMBLrel. 25, Creat 01-OCT-2003 (TrEMBLrel. 25, Last 01-OCT-2003 (TrEMBLrel. 25, Last Apolipoprotein B 100 (Fragment).
                                                                                                                                                                                                                                                                                                      Zalophus californianus (California sealion).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; E
Mammalia; Eutheria; Carnivora; Pinnipedia; Otariidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Nandinia binotata (African palm civet).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Carnivora; Fissipedia; Viverridae; Nandiniinae;
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Name=apoB-100;
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Similarity 72.7%;
8; Conservative
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316
34540 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          314
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    76.2%;
72.7%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 48; DB Pred. No. 2.9; 2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 48;
Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3E5B34E780F0039E CRC64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         318
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                                                                                                         e R.K.,
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2.9;
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                                                                                                                   Springer M.S.;
provides comp
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RESULT 13
Q7YQM8
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Q7YQP7
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Best Local S
Matches 8
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Best Local S
Matches 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Q7YQP7
Q7YQP7;
01-OCT-2003
01-OCT-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NON_TER
NON_TER
SEQUENCE
Lipoprotein.
NON_TER
NON_TER
                                                                                                                     Apolipoprotein B 100 (Fragment).

Name-apoB-100;

Nyctimene albiventer (Common tube-nosed fruit bat).

Nyctimene albiventer (Common tube-nosed fruit bat).

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Chiroptera; Megachiroptera; Pteropodidae;

Pteropodinae; Nyctimene.

NCBI_TaxID=48988;
                                                                                                                                                                                                                                                                                                                                                                                                          Lipoprotein.
NON_TER
NON_TER 4
                                            MEDLINE=22761261; PubMed=12878460;
Amrine-Madsen H., Koepfli K.-P., Wayne R.K.,
"A new phylogenetic marker, apolipoprotein B,
evidence for eutherian relationships.";
evidence for eutherian 28:225-240(2003).
                                                                                                                                                                                                   01-OCT-2003 (TrEMBLrel. 25,
01-OCT-2003 (TrEMBLrel. 25,
01-OCT-2003 (TrEMBLrel. 25,
                                                                                                                                                                                                                                      Q7YQM8
Q7YQM8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE=22761261; PubMed=12878460;
Amrine-Madsen H., Koepfli K.-P., Wayne R.K.,
"A new phylogenetic marker, apolipoprotein B,
evidence for eutherian relationships.";
mol. Phylogenet. Evol. 28:225-240(2003).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NCBI_TaxID=9978;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ochotona princeps (Southern American pika).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Lagomorpha; Ochotonidae; Ochotona.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Apolipoprotein B 100 Name=apoB-100;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-OCT-2003 (TrEMBLrel. 25, Crea 01-OCT-2003 (TrEMBLrel. 25, Last 01-OCT-2003 (TrEMBLrel. 25, Last Apolipoprotein B 100 (Fragment).
                                  EMBL; AF548435; AAP97391.1;
                                                                                                    SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                         EMBL; AF548414; AAP97370.1;
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8; Conserv
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318
318
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411
411 AA;
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ilarity 72.7%;
Conservative
  1
436
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34888 MW;
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436
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72.7%;
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ent).
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Pred. No. 3.8;
2; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                              077F419F951FF05A CRC64;
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                                                                                                                                                                                                                sequence update)
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3.8;
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                                                                                                                                                                                                   update)
                                                                               Springer M.S.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Springer M.S.
provides com
                                                                    provides compelling
                                                                                                                                                                                                                                                                                                                                                                       Length 411;
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RESULT 14
Q7YQR4
Q7YQR
AC Q7YQR
DT 01-0C
DT 01-0C
DT 01-0C
DT 01-0C
Euka
OC Bala,
OC Bala,
OC Mamma
OC Mamma
OC Mamma
CO Manma
CO
       RESULT 15
Q7YR04
ID Q7YR0
AC Q7YR0
DT 01-OC
DT 0
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Best Local S
Matches 8
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Best Local
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                                           Lipoprotein.
NON_TER
NON_TER
4
                                                                                                                              SEQUENCE FROM N.A.

MEDLINE-22761261; PubMed=12878460;

Amrine-Madsen H., Koepfli K.-P., Wayne R.K.,

"A new phylogenetic marker, apolipoprotein B,

evidence for eutherian relationships ";

Mol. Phylogenet. Evol. 28:225-240(2003).

EMBL; AY243383; AAP50771.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         07YR04;
01-OCT-2003 (TrEMBLrel. 25, Created)
01-OCT-2003 (TrEMBLrel. 25, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
Apolipoprotein B (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Lipoprotein.
NON_TER
NON_TER
SEQUENCE 43
                                                                                                                                                                                                                                                                                                                                                                                                                                      Rousettus amplexicaudatus (Common rousette).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Chiroptera; Megachiroptera; Pteropodidae;
Pteropodinae; Rousettus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.

MEDLINB=22761261; PubMed=12878460;

Amrine-Madsen H., Koepfli K.-P., Wayne R.K., Springer M.S.;

"A new phylogenetic marker, apolipoprotein B, provides compelling evidence for eutherian relationships.";

Mol. Phylogenet. Evol. 28:225-240(2003).

EMBL; AF548397; AAP97353.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                  NCBI_TaxID=58083;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Q7YR04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Balaena mysticetus (Bowhead whale).
Balaena mysticetus (Bowhead khale).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Cetartiodactyla; Cetacea; Mysticeti; Balaenidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-OCT-2003 (TrEMBLrel. 25, Created)
01-OCT-2003 (TrEMBLrel. 25, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
Apolipoprotein B 100 (Fragment).
NameapoB-100;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Balaena
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Q7YQR4;
01-OCT-2003
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[1]
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           KAQYKKNKDKH 81
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8; Conserv
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   438
438 AA;
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ilarity 72.7%;
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   48597 MW;
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72.7%;
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Pred. No. 4.1;
2; Mismatches
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Pred. No. 4.1;
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41C890DEAF95C872 CRC64;
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, provides compelling
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                            Query Match
Best Local Similarity
Matches 8; Conserv
76
            1 KAEYKKNKHRH 11
KAQYKKNKDKH
                               Conservative
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72.7%;
86
                             Score 48; DB 2
Pred. No. 4.1;
2; Mismatches
                                             2;
                                             Length 438;
                              Indels
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                             Gaps
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Search completed: January 12, 2005, 13:30:53 Job time: 110.645 secs

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Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
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 A Geneseq_23Sep04:*
1: geneseqp1990s:*
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54
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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The present sequence represents a specifically claimed Apo B binding site peptide which can be used as a component of a non-naturally occurring, receptor-competent low density lipoprotein (LDL) particle of the present invention. The LDL particle comprises at least 1 peptide component that has at least 1 binding site for an apo B protein receptor and at least 1 lipophilic substituent. Also described in the invention are peptides containing an apo B binding sequence with at least 70% identity with sequences: KAEYKONKHRH (1) or TRAITERRGLK (2), or their dimers. Non-naturally occurring, receptor-competent LDL particles are useful as: (i) drug-targeting vectors for delivering anticancer drugs to cancer cells that express an apo B protein receptor, and (ii) additives for cell culture media especially as growth supplements. Non-naturally occurring,

Non-natural lipid particle comprising peptide binding to apo B protein receptor - useful as, e.g. vector for delivering drugs to cancer cells

WPI; 1998-230637/20.

Claim 12; Page 52; 73pp; English.

that express this receptor.

| .0 4563 8 ADD18870 AAD18870 .0 4563 8 ADD33445 Ad033445 .0 4563 8 ADD33447 Ad033447 .0 4590 4 AAU33184 Ad033447 .0 4590 4 AAU33184 AAU33184 .1 12 AAW41261 Aaw41261 .3 10 2 AAY30687 Aay30687 .3 10 4 AAG94401 Aay90687 .3 10 4 AAG94491 Aag94491 .3 10 2 AAY30690 Aag9491 .5 10 2 AAY30690 Aay30690 .5 10 2 AAY30692 Aay30690 .5 10 2 AAY30688 Aag94940 .5 10 2 AAY30688 Aay30688 .5 11 2 AAW87717 Aaw87717 .5 11 2 AAW87717 Aaw87717 .5 11 5 AAE21732 Aaw87713 .5 11 7 ADF56451 Aaw41260 Aaw41260 | 45 | 44 | 43 | 42 | 41 | 40 | 39 | 38 | 37 | 36 | 35 | 34 | 33 | 32 | 31 | 30 | 29 | 28 | 27 | 26 |
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| 8 ADH18870 Adh18870 8 ADO33445 AdO33445 8 ADO33447 AdO33445 8 ADO33447 AdO33447 4 AAU33184 AdO33447 2 AAW41261 AAW41261 2 AAY30682 AAY30682 2 AAX30687 AAG94401 4 AAG94401 AAG94441 4 AAG94441 AAG94441 AAG94441 2 AAX30690 AAY30690 2 AAX30690 AAY30690 2 AAX30688 AAY30686 2 AAX30688 AAY30686 2 AAX30688 AAY30688 2 AAX30688 AAY30688 2 AAX30688 AAW3717 5 AAE21732 AAW87717 5 AAE21732 AAW87717 5 AAE21732 AAW871732 6 AABU07938 AABU07938 7 AAF56451 AAW41260 AAW41260 | 81.5 | 81.5 | 81.5 | 81.5 | 81.5 | 81.5 | 81.5 | 81.5 | 81.5 | 81.5 | 83.3 | 83.3 | | 83.3 | | 90.7 | 100.0 | 100.0 | 100.0 | 100.0 |
| ADH18870 ADH3870 ADD33445 ADO33447 ADO33447 ADO33447 ADO33447 ADO33447 ADO33447 ADU33184 ADW41261 ADW30682 ADW30682 ADW30682 ADW30682 ADW30687 ADG94401 ADG94535 ADG94441 ADW30690 ADW3 | 12 | 11 | ij | 11 | 11 | 11 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 15 | 4590 | 4563 | 4563 | 4563 |
| Adhiles Ado33445 Ado33447 Ado3347 Ado33184 Aaw41261 Aay30687 Aag94491 Aag94491 Aag94441 Aag94441 Aag94441 Aag945710692 Aay30689 Aay30690 Aay30680 | N | 7 | σ | ഗ | N | N | N | N | N | N | 4 | 4 | 4 | N | N | N | 4 | 8 | 8 | œ |
| | AAW41260 | ADF56451 | ABU07938 | AAE21732 | AAW87717 | AAW57206 | AAY30688 | AAY30686 | AAY30692 | AAY30690 | AAG94441 | AAG94535 | AAG94401 | AAY30687 | AAY30682 | AAW41261 | AAU33184 | ADO33447 | AD033445 | ADH18870 |
| Lip Cogno | | | Abu07938 Apoprotei | | 7 | ٠. | | | | _ | Aag94441 Human con | Aag94535 Human com | • | - | | _ | Aau33184 Novel | Ado33447 Humar | Ado33445 Human | Adh18870 Human |

ALIGNMENTS

RESULT 1 AAW57205

03-AUG-1998 (first entry)

AAW57205;

AAW57205 standard; peptide; 11

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Apo B; binding site; receptor; cancer; drug delivery; anticancer; growth supplement; non-natural lipid particle; low density lipopr LDL; receptor component; apo B100 receptor site.
                                                                                                                            Halbert GW,
                                                                                                                                                                                                    Synthetic.
                                                                                                                                         (UYST ) UNIV STRATHCLYDE.
                                                                                                                                                                25-SEP-1997;
                                                                                                                                                                            02-APR-1998
                                                                                                                                                                                        WO9813385-A2.
                                                                                                                                                                                                                                       Apo B binding site peptide 2.
                                                                                                                            Owens MD,
                                                                                                                                                     96GB-00020153
                                                                                                                                                                 97WO-GB002610.
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                                                                                                                                                                                                                      density lipoprotein;
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ARBUILT 2
AAMS7207
ID AAMS7
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AC AAMS7
AC AAMS7
XX AAMS7
XX AAMS7
AC AAMS7
XX AAMS7
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XX AAMS7
AC AAMS7
AC
CC The present sequence represents a specifically claimed Apo B 100 binding CC site peptide analogue which can be used as a component of a non-cc particle of the present invention. The LDL particle comprises at least 1 creeptor and at least 1 lipophilic substituent. Also described in the CC invention are peptides containing an apo B binding sequence with at least 1 CC dimers. Non-naturally occurring, receptor-competent LDL particles with sequences: KAEYKUNKHHH (1) or TTRLTRKRGLK (2), or their CC dimers. Non-naturally occurring, receptor-competent LDL particles are CC cancer cells that express an apo B protein receptor, and (ii) additives cell culture media especially as growth supplements. Non-naturally cc occurring, receptor-competents. On additives of a sequence, which is large and tends to aggregate, to provide binding a finity to an apo B protein receptor, and (ii) additives are CC afo B sequence, which is large and tends to aggregate, to provide binding affinity to an apo B protein receptor.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 13; Fig 7; 73pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Non-natural lipid particle comprising peptide binding to apo B protein receptor - useful as, e.g. vector for delivering drugs to cancer cells that express this receptor.
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Best Local Similarity
Matches 11; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 1998-230637/20.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Apo B; binding site; receptor; cancer; drug delivery; anticancer; growth supplement; non-natural lipid particle; low density lipoprotein; LDL; receptor component; apo B100 receptor site.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Apo B 100 binding site peptide analogue peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   03-AUG-1998
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAW57207;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 UNIV STRATHCLYDE.
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RESULT 3
AAW96892
ID AAW9
XX AAW9
AX AAW9
AW A
AAW96878-97 represent nuclear localisation signal sequence derived from human apolipoprotein B-100 (appB-100). AppB-100 is a major apoprotein component of very-low density lipoproteins (VLDL), intermediate density present sequence can be used in the composition of the invention. The specification describes a composition that comprises LDL and lipoprotein a. The apolipoproteins for the binding and in vivo transport of nucleic acids. The composition is used to deliver nucleic acids to eukaryotic cells, in cancers (particularly non-small cell lung carcinoma), diabetes, cystic fibrosis and arteriosclerosis
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Best Local S
Matches 11
                                                                                                                                                                                                                                                                                                                                                                                                          Claim 19; Fig 13D; 293pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Composition comprising nucleic acid bound to LDL or VLDL lipoprotein - used for delivering nucleic acid to cells for gene therapy and antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 13-JUN-1997;
14-MAY-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 1999-070331/06.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Guevara JG, Hoogeveen RC, Moore JP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (BAYU ) BAYLOR COLLEGE MEDICINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human apolipoprotein B-100; apoB-100; very-low density lipoprotein; VLDL; apolipoprotein; binding; in vivo transport; nucleic acid; binding domain; nuclear localisation sequence; gene therapy; cancer; cystic fibrosis; non-small cell lung carcinoma; diabetes; arteriosclerosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    10-JUN-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17-DEC-1998.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO9856938-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ApoB-100 nuclear localisation signal sequence, residues 3353-3367.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           22-APR-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAW96892;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAW96892 standard; peptide; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 TTRLTRKRGLK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  N
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11; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTRLTRKKGLK 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ilarity 100.0%; Score 54; DB 2; I 100.0%; Pred. No. 0.0026; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 98US-00079030.
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RESULT 4 ABJ37575

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1 TTRLTRKRGLK 11

TTRLTRKRGLK

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Query Match Best Local S Matches

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100.0%; S 100.0%; F ative 0;

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Matches
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                                                                   Apo B; binding site; receptor; cancer; drug delivery; anticancer; growth supplement; non-natural lipid particle; low density lipoprotein; LDL; receptor component; apo B100 receptor site.
                                                                                                                                                                                                                                                                                                                                                                                             The invention relates to a novel ligand for binding a target biomolecule, which comprises a peptide having at least one sulphated or sulphonated smino acid and at least one amino acid chosen from neutral and positively charged amino acide. The novel ligands can be used for the treatment of e.g. tumours, rheumatoid arthritis, diabetic retinopathy and hypoxia. This sequence represents a heparin binding peptide relating to the
                                                                                                                                                                        AAW57208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (ETHZ-)
           Key
Modified-site
                                                                                                                     Apo B 100 binding site peptide analogue peptide
                                                                                                                                                 03-AUG-1998
                                                                                                                                                                                               AAW57208 standard; peptide; 22 AA
                                                                                                                                                                                                                                                                                                                                                            Sequence 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Disclosure; Fig 2; 79pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Use of a ligand comprising of at least acid for the treatment of e.g. tumors, retinopathy and hypoxia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2003-300420/29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20-JUL-2001; 2001US-0306726P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Cytostatic; antirheumatic; antiarthritic; antidiabetic; ophthalmological; cardiovascular; circulatory; ligand; sulphated; sulphonated; tumour; rheumatoid arthritis; hypoxia; diabetic retinopathy; heparin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Heparin binding peptide sequence #28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       10-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABJ37575 standard; peptide; 20 AA
                                                                                                                                                                                                                                                                                                                        Local
                                                                                                                                                                                                                                                                                                            l Similarity
11; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ETH ZUERICH.
UNIV ZURICH.
                                                                                                                                                                                                                                                           TTRLTRKRGLK 16
                                                                                                                                                                                                                                                                                  TTRLTRKRGLK 11
                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                               (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                       Location/Qualifiers
/note= "attached to retinoic acid"
                                                                                                                                                                                                                                                                                                                       100.0%;
                                                                                                                                                                                                                                                                                                            0,
                                                                                                                                                                                                                                                                                                           Score 54; DB 6;
Pred. No. 0.004;
; Mismatches 0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         one sulfated or sulfonated amino rheumatoid arthritis, diabetic
                                                                                                                                                                                                                                                                                                            ..
                                                                                                                                                                                                                                                                                                                                  Length 20;
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RESULT 6
AAW57209
ID AAW57209
AC AAW5

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The present sequence represents a specifically claimed Apo B 100 binding CC site peptide analogue which can be used as a component of a non-naturally occurring, receptor-competent low density lipoprotein (LDL) CC particle of the present invention. The LDL particle comprises at least 1 cc peptide component that has at least 1 binding site for an apo B protein CC receptor and at least 1 lipophilic substituent. Also described in the CC invention are peptides containing an apo B binding sequence with at least CC 10% identity with sequences: KABYKKNKHRH (1) or TRILTREGIK (2), or their CC dimers. Non-naturally occurring, receptor-competent LDL particles are CC useful as: (i) drug-targeting vectors for delivering anticancer drugs to cancer cells that express an apo B protein receptor, and (ii) additives CC concercell culture media especially as growth supplements. Non-naturally occurring, receptor-competent LDL particles do not require the complete caffilty to an apo B protein receptor, and (ii) additives concurring, receptor-competent LDL particles do not require the complete caffilty to an apo B protein receptor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
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affinity
                                                                                                                                                                                                                                                                                            Apo B; binding site; receptor; cancer; drug delivery; anticancer; growth supplement; non-natural lipid particle; low density lipoprotein; LDL; receptor component; apo B100 receptor site.
                                                                                                                                                                                                                                        Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                03-AUG-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAW57209 standard; peptide; 22
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Non-natural lipid particle comprising receptor - useful as, e.g. vector for that express this receptor.
                                                             WO9813385-A2
                                                                                                                                                 Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                  Apo B 100 binding site peptide analogue peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 1998-230637/20.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              27-SEP-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         25-SEP-1997;
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Similarity 100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   to an
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                                                                                                                                                                             Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                B protein receptor
                                                                                                                     "attached to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Baillie G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 54; DB 2;
Pred. No. 0.0044;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
                                                                                                                     retinoic acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cholesterol"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
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02-APR-1998

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The present sequence represents a specifically claimed Apo B 100 binding CC site peptide analogue which can be used as a component of a non-competent low density lipoprotein (LDL) CC particle of the present invention. The LDL particle comprises at least 1 creeptor and at least 1 lipophilic substituent. Also described in the CC invention are peptides containing an apo B binding sequence with at least 1 CC dimers. Non-naturally occurring, receptor-competent LDL particles are ccc useful as: (i) drug-targeting vectors for delivering anticancer drugs to CC cancer cells that express an apo B protein receptor, and (ii) additives and ccll culture media especially as growth supplements. Non-naturally cccurring, receptor, and (ii) additives are CC cocurring, receptor-competent LDL particles are ccll culture media especially as growth supplements. Non-naturally cccurring, receptor-competent LDL particles do not require the complete cc apo B sequence, which is large and tends to aggregate, to provide binding affinity to an apo B protein receptor.
                                                                                                                                                                          18-JUL-2000; 2000GB-00017641.
                                                                                                                         (ARKT-) ARK THERAPEUTICS LTD
                                                                                                                                                                                                                                       18-JUL-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                       Oxidised low density lipoprotein; oxLDL; immunoassay; periaortitis; cardiovascular disease; coronary heart disease; pre-eclampsia; non-insulin-dependent diabetes; endothelial dysfunction; human; apoB-100;
                                                                                                                                                                                                                                                                                                24-JAN-2002.
                                                                                                                                                                                                                                                                                                                                              WO200206314-A2
                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human apoB-100 derived peptide p62.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17-MAY-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAE14541 standard; peptide; 34 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 13; Fig 7; 73pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Non-natural lipid particle comprising peptide binding to apo B protein receptor - useful as, e.g. vector for delivering drugs to cancer cells that express this receptor.
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                                                                     Yla-Herttuala S;
                                                                                                                                                                                                                           2001WO-GB003212.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%; Score 54; DB 2; Length 22; 100.0%; Pred. No. 0.0044; tive 0; Mismatches 0; Indels
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Matches 11
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14-MAY-1998;
                                                                                                                                                                                                                                               Guevara JG,
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RESULT 7 AAE14541

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The invention relates to peptides having affinity for oxidised low density lipoprotein (oxLDL), in cyclised or multimeric form. The peptide consists of antibodies in a sample, having affinity for oxLDL. The peptide constitution of the peptide is useful for measuring the amount of antibodies in a sample, having affinity for oxLDL. The peptide is useful for measuring the amount of constitution of the amount of the amount of the constitution of 
AAW96827-77 represent nucleic acid binding domains derived
                                                                                                 Claim 16; Fig 12C; 293pp; English.
                                                                                                                                                                              Composition comprising nucleic acid bound to LDL or VLDL lipoprotein used for delivering nucleic acid to cells for gene therapy and antise
                                                                                                                                                                                                                                                                                                                                                WPI; 1999-070331/06.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (BAYU ) BAYLOR COLLEGE MEDICINE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human apolipoprotein B-100; apoB-100; very-low density lipoprotein; VI apolipoprotein; binding; in vivo transport; nucleic acid; binding dome nuclear localisation sequence; gene therapy; cancer; cystic fibrosis; non-small cell lung carcinoma; diabetes; arteriosclerosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Nucleic acid binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAW96876 standard; peptide; 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 34 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 6; Page 5; 21pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2002-179777/23.
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                                                                                                                                                                                                                                                                                                                                                                                                                    Hoogeveen RC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
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98US-00079030.
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                                                                                                                                                                                                                                                                                                                                                                                                                    Moore JP;
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Pred. No. 0.0068;
Mismatches 0
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used with Factor V protein fragments in a novel method to detect the presence of a mutated protein in a sample that may also contain the corresponding wild-type protein. The method is used to detect mutations that alter protein functions (either point mutation or small insertions or deletions), particularly in proteins involved in blood coagulation or metabolism of fat. Protein functions which are specially detectable are the Leyden mutation in factor V (associated with increased risk of deep vein thrombosis), mutations in apolipoprotein (apo) genes (certain alleles of apoE indicates increased risk of developing Alzheimer's disease), thermostable 5,10-methylenetetrahydrofolate reductase (associated with hypercysteinaemia and venous thrombosis) and factor VII mutations (associated with increased risk of cardiovascular disease). The
                                                                                                                                                                                                                                                                                                                                                    Detecting or quantifying mu comprises reaction with lig factors or apolipoproteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       apolipoprotein B-100 (apoB-100). ApoB-100 is a major apoprotein component of very-low density lipoproteins (VLDL), intermediate density lipoprotein (IDL), low density lipoproteins (LDL) and lipoprotein a. The present sequence can be used in the composition of the invention. The specification describes a composition that comprises LDL and apolipoproteins for the binding and in vivo transport of nucleic acids. The composition is used to deliver nucleic acids to eukaryotic cells, in vivo or in vitro, for expressing a therapeutic polypeptide or antisense molecule (or ribozyme). Specifically they are used for gene therapy of cancers (particularly non-small cell lung carcinoma), diabetes, cystic fibratic and straticularly non-small cell lung carcinoma), diabetes, cystic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Factor V; human; detection; protein function; blood coagulation; apo; fat metabolism; Leyden mutation; deep vein thrombosis; apolipoprotein; Alzheimer's disease; 5,10-methylenetetrahydrofolate reductase; prion; hypercysteinaemia; factor VII; cardiovascular disease; pathogen; virus
                                                                                                                                                                                                                                                                    AAW64587 and AAW64588 are fragments of human apolipoprotein which are
                                                                                                                                                                                                                                                                                                                     Example
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                                                                                                                                                                                                                                                                                                                                                           or quantifying mutant protein in presence of wild-type protein reaction with ligand - used to detect mutant blood coagulation apolipoproteins for diagnosing risk of thrombosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Kiessig S,
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nilarity 100.0%;
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Pred. No. 0.0072;
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Best Local Similarity
                                            AAW96827-77 represent nucleic acid binding domains derived from human apolipoprotein B-100 (apoB-100). ApoB-100 is a major apoprotein component of very-low density lipoproteins (VLDL), intermediate density lipoprotein (IDL), low density lipoproteins ((LDL) and lipoprotein a. The present sequence can be used in the composition of the invention. The specification describes a composition that comprises LDL and apolipoproteins for the binding and in vivo transport of nucleic acids. The composition is used to deliver nucleic acids to eukaryotic cells, in vivo or in vitro, for expressing a therapeutic polypeptide or antisense molecule (or ribozyme). Specifically they are used for gene therapy of cancers (particularly non-small cell lung carcinoma), diabetes, cystic fibrosis and arteriosclerosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   method can also be applied to proteins from pathogens, e.g. viruses or prions. The method does not require complex apparatus for polymerase chain reactions, it is simple, standardisable and reliable and is particularly suited to routine screening. It also allows mutant protein in a sample to be quantified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Composition comprising nucleic acid bound used for delivering nucleic acid to cells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Guevara JG,
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14-MAY-1998;
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nuclear localisa
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                                                                                                                                                                                                                                                                                                                                                                                                                           16; Page 151; 293pp;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    standard; peptide;
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98US-00079030.
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                                                                                                                                                                                                                                                                                                                                                                                                                           English.
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Pred. No. 0.0073;
Mismatches 0
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Query Match 100.0%; Best Local Similarity 100.0%; Matches 11; Conservative 0

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Score 54; DB 2 Pred. No. 0.01; Mismatches

2 °.

Length 51;

Indels

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Gaps

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Sequence

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RESULT 12
ABG52504
ID ABG52
XX
AC ABG52
XX
DT 25-FE
XX
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                                                                                                                                          Matches
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       25-FEB-2003
                            ABG52504;
                                        ABG52504 standard; peptide; 343 AA
                                                                                                                                                                                The invention relates to a single exon nucleic acid probe for measuring human gene expression in a sample derived from human foetal liver. The single exon nucleic acid probes may be used for predicting, measuring and present sequence is a peptide encoded by a single exon nucleic acid probe for the invention. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                     04-FEB-2000; 2000US-0180312P.
26-MAY-2000; 2000US-0207456P.
30-JUN-2000; 2000US-00608408.
03-AUG-2000; 2000US-023366.
21-SEP-2000; 2000US-0234687P.
04-OCT-2000; 2000GB-00024263.
                                                                                                                                                                               Sequence 343 AA;
                                                                                                                                                                                                                                                                                             Claim 27; SEQ
                                                                                                                                                                                                                                                                                                Human genome-derived single exon nucleic acid probes useful for analyzing gene expression in human fetal liver.
                                                                                                                                                                                                                                                                                                                                            WPI; 2001-483447/52.
                                                                                                                                                  Local
                                                                                                                                                                                                                                                                                                                                                                                        (MOLE-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     30-JAN-2001; 2001WO-US000669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            09-AUG-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human; foetal liver; gene expression; single exon nucleic acid probe.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Peptide #5193 encoded by human foetal liver single exon probe.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                    SG,
                                                                                                                      _
                                                                                                                                        11;
                                                                                                                                                Similarity
                                                                                                                TTRLTRKRGLK 11
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                                                                                                                                                                                                                                                                                                                                                               Hanzel DK,
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| TTRLTRKRGLK 15
    (first entry)
                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    standard; peptide;
                                                                                                                                                                                                                                                                                ID NO 30322; 639pp + Sequence Listing; English.
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                                                                                                                                             100.0%;
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                                                                                                                            Score 54; DB 4; Le:
Pred. No. 0.065;
Wiematches 0;
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RESULT 13
AAR72704
ID AAR72
XX AAR72
AC AAR72
XX 31-OC
XX 31-OC
XX Human
XX Apo B
KW 11pid
XX
OS Homo
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      measuring human gene expression in a sample derived from human adult comprising one of 13109 defined nucleotide sequences given in the stringency to a nucleic acid molecule expressed in the human adult liver. (I) may be used for predicting, measuring and displaying gene expression in samples derived from human adult liver. The genes identified may be used for predicting, measuring and displaying gene expression complements in the human adult liver. The genes identified may be used from human adult liver. The genes identified may be hyperlipoproteinaemia, hyperlipidaemia and hypercholesterolaemia which is consisted with coronary heart disease. ABG47348-ABG5930 represent human confirmation for this patent does not appear in the printed specification for this patent does not appear in the printed specification for this patent does not appear in the printed specification for this patent does not appear in the printed specification for this patent does not appear in the printed specification for this patent does not appear in the printed specification for this patent does not appear in the printed specification for this patent does not appear in the printed specification for this patent does not appear in the printed specification for this patent does not appear in the printed specification for this patent does not appear in the printed specification for this patent does not appear in the printed specification for this patent does not appear in the printed specification for this patent does not appear in the printed specification for this patent does not appear in the printed specification for this patent does not appear in the printed specification for this patent does not appear in the printed specification for this patent does not appear in the printed specification for this patent does not appear in the printed specification for this patent does not appear in the printed specification for this patent does not appear in the printed specification for this patent does not appear in the printed from the printed from
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Matches
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                Homo sapiens.
                                                         Apo B-100; hybridoma MB47; LDL cholesterol; low density lipoprotein; lipid.
                                                                                                                Human apo B-100 polypeptide 89
                                                                                                                                                                       31-OCT-1995
                                                                                                                                                                                                                   AAR72704;
                                                                                                                                                                                                                                               AAR72704 standard; protein; 377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           04-FEB-2000; 2000US-0180312P.
26-MAY-2000; 2000US-0207456P.
30-JUN-2000; 2000US-00608408.
03-AUG-2000; 2000US-00632366.
21-SEP-2000; 2000US-0234687P.
27-SEP-2000; 2000US-0236359P.
04-OCT-2000; 2000GB-00024263.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 343 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The invention relates to a single exon nucleic acid probe (SENP) (I) measuring human gene expression in a sample derived from human adult
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human genome-derived single exon nucleic acid probes useful for analyzing gene expression in human adult liver.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2001-488898/53.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; liver; cirrhosis; hyperlipoproteinaemia; hyperlipidaemia;
hypercholesterolaemia; coronary heart disease.
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                                                                                                                                                                                                                                                                                                                                                                            168
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
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ilarity 100.0%; !
Conservative 0;
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Pred. No. 0.065;
; Mismatches 0;
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                                                                                                                                       CC corresp. cDNA, from A residue 3214 through residue 3590 according to the fundering scheme of Ludwig et al., DNA, 6:363 (1987). Ludwig et al. CC reported the full cDNA sequence for the human apo B-100 gene, consisting cof 29 exons. AAQ89633 corresp. to nts 9642-1070. The apo B-100 cDNA sequences for the special collar co
                                                                                    Query Match
Best Local
                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 1993-134378/16.
N-PSDB; AAQ89633.
                                                                                                                                       Sequence 377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAQ89633 and AAR72704 depict the AA sequence of human apo B-100 and it corresp. cDNA, from AA residue 3214 through residue 3590 according to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 6; Fig 1; 41pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Polypeptide mimic of native apo B-100 and native assays for LDL and HDL in plasma samples.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          09-OCT-1991;
18-JUN-1992;
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144
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                                                                                    Similarity
TTRLTRKRGLK 154
                                TTRLTRKRGLK 11
                                                                   Conservative
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92US-00901706.
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label= claimed
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.297
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.377
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.297
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                                                                                  Score 54; DB 2;
Pred. No. 0.071;
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                                                                 Mismatches
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                                                                                                 Length 377;
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                                                                 Indels
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RESULT 14
AAR34031
ID AAR34
XX
                              . AAR34031;
                                                   The inventors claim a portion of the polypeptide contg. apo B-100 that immunoreacts with antibodies secreted by the hybridoma MB47 having ATCC Accession No. 8746. Polypeptides specifically claimed include residues 217-297, 216-310, 216-331, 216-352, 216-377, 1-377, 205-297, 173-297, 140-297. DNA sequences encoding the polypeptides are also claimed. Also claimed are a fusion polypolypeptide that contains: (a) a first maino acid residue sequence up to 250 residues in length that includes residues 120-135 of apo A-I, (b) a second amino acid residue sequence up to 375 residues in length that includes residues 217-297 of apo B-100 and DNA encoding it. (Updated on 25-MAR-2003 to correct PN field.) (Updated on 25-MAR-2003 to correct PR field.)
                                                                                                                                                                                                                                                                                                                                                                                        09-OCT-1991;
18-JUN-1992;
08-OCT-1992;
                            Sequence 377 AA;
                                                                                                                                                                                                                                                Polypeptide mimic of native apo B-100 and assays for LDL and HDL in plasma samples.
                                                                                                                                                                                                                                                                                         N-PSDB;
                                                                                                                                                                                                                                                                                                                                   Smith RS,
                                                                                                                                                                                                                                                                                                                                                                                                                                              09-OCT-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence of apo B-100
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13-AUG-1993
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                                                                                                                                                                                                                       Claim 6; Page 103-104; 137pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Lipoprotein; apoprotein; B-100; A-I; LDL; HDL; assay
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(first entry)
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92US-00901706.
92US-00959946.
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Length 377;
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RESULT 15
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                                     06-MAY-2004
                                                     ADJ57400;
                                                                   ADJ57400 standard; protein; 2463 AA
                                                                                                         144 TTRLTRKRGLK 154
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                                                                                                                        1 TTRLTRKRGLK 11
                                                                                                                                       Conservative
                                     (first entry)
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Pred. No. 0.071;
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                                                                                                                                       Gaps
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Hepatocellular carcinoma; marker; human; apolipoprotein B; diagnosis

Human apolipoprotein B, marker for hepatocellular carcinoma.

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Search completed: January 12, 2005, 13:25:40 Job time: 102.484 secs
                                                                                                                                                                                                                                   CC The present sequence is that of human apolipoprotein B. This non-cell CC associated protein is one of a set of proteins characterised as associated protein is one of a set of proteins characterised as CC diagnostic targets for hepatocellular carcinoma (HCC). Such proteins are CC the products of genes identified by expression microarray analysis of the products of genes identified by expression microarray analysis of CC tenour samples from hepatitis C virus (HCV) infected patients with HCC as CC infected cirrhotic non-tumour tissue and normal liver. The invention CC crelates to the detection of HCC by assaying patient samples such as CC related proteins. A finding of the presence and level of specific HCC CC proteins in a patient sample indicates that the patient has HCC. Methods CC and scanning methods that employ non-cell-associated and cell-associated xxx
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Matches 11
                                                                                                                                                                                                                Sequence 2463 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Disclosure; SEQ ID NO 4; 48pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Detecting hepatocellular carcinoma (HCC) in mammals comprises obtaining and assaying a biological sample to quantify a cell-associated or a noncell-associated HCC-related protein and comparing the quantity to a control level.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2004-142977/14.
GENBANK; NP_000375.
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                                                                       1284 TTRLTRKKGLK 1294
                                                                                                                                          ch 100.0%; Score 54; DB 8; Length 2463;
il Similarity 100.0%; Pred. No. 0.45;
11; Conservative 0; Mismatches 0; Indels (
                                                                                               1 TTRLTRKRGLK 11
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Listing first 45 summaries
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        Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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4: /cgn2_6/ptodata/1/iaa/6B_COMB.pep:*

5: /cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*

6: /cgn2_6/ptodata/1/iaa/backfIles1.pep:*
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Copyright (c) 1993 - 2005 Compugen Ltd
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US-09-079-030-223
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151, Appli
161, Appli
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RESULT 2 US-09-269-533A-4

Sequence 4, Application US/09269533A Patent No. 6670452

GENERAL INFORMATION:
APPLICANT: University of Strathclyde
APPLICANT: Halbert, Gavin
APPLICANT: Halbert, Gavin
APPLICANT: Owens, Moira
APPLICANT: Bailite, George
APPLICANT: Bailite, George
TITLE OF INVENTION: No. 6670452-Naturally Occurring Lipoprotein Particle
FILE REFERENCE: P07885US
CURRENT APPLICATION NUMBER: US/09/269,533A

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Matches

Conservative

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Mismatches

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Gaps

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Length 11; Indels

Query Match Best Local Similarity 11;

100.0%; Score 54; DB 4; 100.0%; Pred. No. 0.00047;

| RESULT 1 US-09-269-533A-2 IS Sequence 2, Applicat PAREAL INFORMATION: GENERAL INFORMATION: APPLICANT: Universi APPLICANT: Universi APPLICANT: Halbert APPLICANT: Baillie TITLE OF INVENTION: FILE REFERENCE: PO? CURRENT APPLICATION CURRENT APPLICATION CURRENT APPLICATION PRIOR FILING DATE: ONGALISM: Artifici PLOCATION: () . () JOHER INFORMATION: US-09-269-533A-2 | 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 |
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| y-269-533A-2 | 。。。。 |
| 19-533A-2 19-533A-2 1 NO. 6670452 1 OPFILE BAILLIE, George 1 OF INVENTION: 1 OF INVENTION: 1 OPFILE PO7885US 1 APPLICATION NUMBER: BUS/0 1 APPLICATION NUMBER: GB 962 2 FILING DATE: 1996-09-27 3 ARE: PATENTIN EST 1996-09-27 3 NO 2 3 PTH: 11 3 PRT 3 NF SEQ ID NOS: 7 3 NO 2 3 PTH: 11 3 NF SEQ ID NOS: 7 3 NO 2 3 PTH: 11 5 PRT 5 NF SEQ ID NOS: 7 | 81.5 81.5 79.6 79.6 77.8 77.8 77.3 77.3 71.3 71.3 71.3 |
| ty of Strat, Gavin Moira, George No. 667045 885US NUMBER: P9-06-10MBER: GB 91996-09-27 version 3.0 apo B bind Apo B bind | 785 785 10 10 10 10 10 11 11 11 11 11 11 11 11 |
| 69533A thclyde 52-Naturally Occurring \$/09/269,533A -01 /GB97/02610 9620153.8 0 0 ding site sequence | 3 US-08-981-122-85 4 US-09-079-030-216 4 US-09-265-222-3 4 US-09-265-222-4 4 US-09-265-222-10 4 US-09-265-222-12 4 US-09-265-222-12 4 US-09-265-222-17 4 US-09-265-222-19 4 US-09-265-222-19 4 US-09-265-222-19 5 US-09-265-222-19 6 US-09-265-222-19 6 US-09-265-222-19 7 US-09-265-222-19 8 US-09-265-222-19 9 US-09-265-222-19 |
| Lipoprotein Particle | Sequence 85, Appl Sequence 216, Appli Sequence 2, Appli Sequence 3, Appli Sequence 4, Appli Sequence 10, Appl Sequence 11, Appl Sequence 16, Appl Sequence 17, Appl Sequence 19, Appl Sequence 19, Appl Sequence 19, Appl Sequence 19, Appl Sequence 4590, Appl Sequence 693, Appl Sequence 65, Appl Sequence 5, Appl Sequence 5, Appl Sequence 5, Appl Sequence 693, Appl Sequence 693, Appl Sequence 693, Appl Sequence 69, Appl Sequence 69, Appli Sequence 69, Appli Sequence 6, Appli Sequence 5, Appli Sequence 6, Appli Sequence 6, Appli |

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US-09-079-030-205
                                                                                                                                                                                                                                             COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC_DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Version #1.30
APPLICATION NUMBER: US/09/079,030
PILING DATE: Concurrently Harmore CLASSIFICATION:
NAMPEY/AGENT
      Query Match
Best Local Similarity
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NAME/KEY: misc feature

LOCATION: ()...()

OTHER INFORMATION: Synthesised peptide analogue of the Apo B 100 binding site

LOCATION: ()...()

OTHER INFORMATION: Retinoic acid linked at N-terminus of peptide analogue

US-09-269-533A-4
                                                                                                             TELEFAX: 512/474-7577
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 15 amino acids
                                                                                                                                                                           ATTORNEY/AGENT INFORMATION:
NAME: MCMillian, Nabeela R.
REGISTRATION NUMBER: P-43,363
REFERENCE/DOCKET NUMBER: ARAG
TELECOMMUNICATION INFORMATION:
TELEPHONE: 512/418-3000
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PRIOR APPLICATION NUMBER: PCT/GB97/02610
PRIOR FILING DATE: 1997-09-25
PRIOR APPLICATION NUMBER: GB 9620153.8
PRIOR FILING DATE: 1996-09-27
NUMBER: OF SEQ ID NOS: 7
SOFTWARE: Patentin version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
ADDRESSEE: Arnold, W
                                                                    STRANDEDNESS:
TOPOLOGY: 11
                                                                                                  TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE OF INVENTION: LIPOPROTEINS AS NUCLEIC ACID DELIVERY
TITLE OF INVENTION: VECTORS FOR TRANSFECTION OF EUKARYOTIC CELLS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LENGTH: 13
TYPE: PRT
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ZIP: 77210
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity 100.
les 11; Conservative
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6635623
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                    P.O. Box 4433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Moore, Paul
                                                                                                                                                                       512/418-3000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Guevera, Jr., Juan G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Hoogeveen,
    100.0%;
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                                                                                                                                                                                                                      P-43,363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ron C.
                                                                                                                                                                                                       ARAG: 003
Score 54; DB 4;
Pred. No. 0.00065;
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Pred. No. 0.
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0.00056;
         Length 15;
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            SEQ ID NO 6
LENGTH: 22
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                  APPLICANT: Bailly, George
TITLE OF INVENTION: No. 6670452-Naturally Occurring Lipoprotein Particle
FILE REFERENCE: P07885US
CURRENT APPLICATION NUMBER: US/09/269,533A
CURRENT FILING DATE: 1999-06-01
PRIOR APPLICATION NUMBER: P07/GB97/02610
PRIOR FILING DATE: 1997-09-25
PRIOR FILING DATE: 1996-09-25
PRIOR APPLICATION NUMBER: GB 9620153.8
NUMBER OF SEQ ID NOMS: 7
SOFTWARE: Patentin version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 100.
Them 11; Conservative
                                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                     APPLICANT: University of Strathclyde APPLICANT: Halbert, Gavin APPLICANT: Owens, Moira APPLICANT: Baillie, George
                                                                                                                                                                                                                                                                                 Patent No.
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SEQ ID NO 5
LENGTH: 22
TYPE: PRT
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TYPE: PRT
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TITLE OF INVENTION: No. 6670452-Naturally Occurring Lipoprotein Particle
FILE REFERENCE: P07885US
CURRENT APPLICATION UNDER: US/09/269,533A
CURRENT FILING DATE: 1999-06-01
PRIOR APPLICATION NUMBER: PCT/GB97/02610
PRIOR FILING DATE: 1997-09-25
PRIOR FILING DATE: 1997-09-25
PRIOR FILING DATE: 1996-09-27
NUMBER: OF SEQ ID NOS: 7
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OTHER INFORMATION: Cholesterol linked at C-terminus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME/KEY: misc feature
LOCATION: ()...()
OTHER INFORMATION: Synthesised peptide analogue of the Apo B 100 binding site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Patent No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: University of Strathclyde
                                                                                                                                                                                                                                                                 INFORMATION:
                                                                                                                                                                                                                                                                                 6, Application US/09269533A
5. 6670452
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 INFORMATION:
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Owens, Moira
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Pred. No.
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RESULT 7
US-09-079-030-98
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COTHER INFORMATION: Synthesised peptide analogue of the Apo B 100 binding
NAME/KEY: misc_feature
LOCATION: ()..()

OTHER INFORMATION: Retinoic acid linked at N-terminus of peptide analogue
US-09-269-533A-6
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Best Local :
                                                                                                                                               Matches
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Best Local Similarity
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                                                                                                                                                                                                                                                                                      TELEFAX: 512/474-7577
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                                        REGISTRATION NUMBER: P-43,363
REFERENCE/DOCKET NUMBER: ARAG:003
TELECOMMUNICATION:
TELEPHONE: 512/418-3000
                                                                                                                                                                                                                                                                                                                                                                                   ATTORNEY/AGENT INFORMATION:
NAME: McMillian, Nabeela R.
REGISTRATION NUMBER: P-43,3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: PatentIn Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION: LIPOPROTEINS AS NUCLEIC ACID DELIVERY TITLE OF INVENTION: VECTORS FOR TRANSFECTION OF EUKARYOTIC CELLS NUMBER OF SEQUENCES: 229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Guevera, Jr., Juan G. APPLICANT: Hoogeveen, Ron C. APPLICANT: Moore, Paul J.
                                                                                                                                                                                                                        STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER: IBM PC OPERATING SYSTEM:
                                                                                                                                                                                                                                                         TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US/09/079,030 FILING DATE: Concurrently Herewith CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY: USA
ZIP: 77210
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                                                                                                                                                              Local Similarity
                                                                                                                                                                                                                                                                          LENGTH:
                                                                                                                                               11; Conservative
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                                                                                                               1 TTRLTRKRGLK 11
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   Application US/09079030
                                                                                                                                                                                                                                                                            36 amino acids
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IBM PC compatible
SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                        100.0%; St.
100.0%; Pr
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                                                                                                                                                            Score 54; DB 4;
Pred. No. 0.0016;
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Pred. No. 0.00095;
; Mismatches 0;
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                                                                                                                                                                           Length 36;
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                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 1, Application Patent No. 5408038
GENERAL INFORMATION:
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: BC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION UMBER: US/09/079,030
FILING DATB: Concurrently Herewith
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
ATTORNEY/AGENT INFORMATION:
REGISTRATION NUMBER: P-43,363
REFERENCE/DOCKET NUMBER: D-43,363
REFERENCE/DOCKET NUMBER: ARAG:003
TELECOMMUNICATION INFORMATION:
TELEPHONE: 512/418-3000
TELEPHONE: 512/418-3000
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APPLICANT: Guevera, Jr., Juan G.
APPLICANT: Hoogeven, Ron C.
APPLICANT: Hoogeven, Ron C.
APPLICANT: Moore, Paul J.
TITLE OF INVENTION: LIPOPROTEINS AS NUCLEIC ACID DELIVERY
TITLE OF INVENTION: VECTORS FOR TRANSFECTION OF EUKARYOTIC CELLS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEFAX: 512/474-7577
INFORMATION FOR SEQ ID NO:
                                ZIP: 60601
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                    STREET: LUC
CITY: Chicago
CITY: Illinois
                                                                                                                                                                                                                                                                                                                  APPLICANT: Smith, Richard K.
APPLICANT: Koduri, Raju
APPLICANT: Young, Stephen G.
APPLICANT: Witztum, Joseph L
APPLICANT: Curtiss, Linda K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE CHARACTERISTICS:
LENGTH: 51 amino acids
                                                                                                                                                                                                                                  CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                     TITLE OF INVENTION:
TITLE OF INVENTION:
NUMBER OF SEQUENCES:
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ADDRESSEE: Arnold, W
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ZIP: 77210
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                      ADDRESSEE: Dressler, Goldsmith, Shore, Sutker ADDRESSEE: Milnamow, Ltd.
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                                                                                                                                                                   180 No. 5408038th Stetson, Suite 4700
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                                                                                                                                                                                                                                                     Witztum, Joseph L.
Curtiss, Linda K.
Curtiss, Linda K.
VENTION: Lipoprotein Assays Using Antibodies to a
VENTION: Pan Native Epitope and Recombinant Antigens
EQUENCES: 20
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FILING DATE:
FILING BATE:
FILIN
TELEFAX: (312)616-5460
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 377 amino acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IRM PC compatible
SOFTMARE: PSTEM: PC-DOS/MS-DOS
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/333,577
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GENERAL INFORMATION:
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Best Local Similarity 100.0%; Score 54; DB 1; Length 377;
Matches 11; Conservative 0; Mismatches 0; Indels
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REGISTRATION NUMBER: 29,381
REFERENCE/DOCKET NUMBER:
TELEPHONE: (312)616-5400
INFORMATION FOR SEQ ID NO: 1:
LENGTH: 37 amino acids
TYPE: MAINO ACID
MOLEPHIA BYTAN
MOLEPHIA BYT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STREET: Chicago
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Smith, Richard K.
APPLICANT: Koduri, Raju
APPLICANT: Voung, Stephen G.
APPLICANT: Witzun, Joseph L.
TITLE OF INVENTION: Lipoprotein Assays Using Antibodies to a
NUMBER OF SEQUENCES: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADDRESSEE: Dressler, Goldsmith, Shore, Sutker & ADDRESSEE: Milnamow, Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/901,706
FILING DATE: 18-UW-1992
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: PatentIn Release #1.0, Version #1.25
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER:
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RESULT 11
US-09-079-030-223
; Sequence 223, Application US/09079030
; Patent No. 6635623
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                                                                                                                                     Query Match
100.0%; Score 54; DB 5; Length 377;
Best Local Similarity 100.0%; Pred. No. 0.017; Length 377;
Matches 11; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                         TELEPHONE: (312)616-54
TELEFAX: (312)616-5460
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                ATTOKNES, GAMBON, Edwaru ...
NAME: GAMBON, Edwaru ...
REGISTRATION NUMBER: 29,381
REFERENCE/DOCKET NUMBER: 18:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION 1016-5400
                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: PCT/USS
FILING DATE: 19921009
CLASSIFICATION: 19921009
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/:
PILING DATE: 18-JUN-1992
ATTORNEY/AGENT INFORMATION:
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PCT-US92-08634-1
                                                                                                                                                                                                                            LENGTH: 377 amino acids
TYPE: AMINO ACID
TOPOLOGY: linear
MOLECULE TYPE: protein
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MEDIUM TYPE: Ploppy disk
COMPUTER: IBM PC comparible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
OPT TAMPTAN NIMBED: PCT/11892/08634
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ;
; MOLECULE TYPE: protein
US-08-333-577-1
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Best Local S
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CITY: Chicago
STATE: Illinois
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TITLE OF INVENTION:
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Smith, Richard K. APPLICANT: Koduri, Raju APPLICANT: Young, Stephen G.
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                                                                                                                           1 TTRLTRKRGLK 11
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TD NO: 1:
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Witztum, Joseph L.
Curtiss, Linda K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               . 180 North Stetson, Suite 4700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     USA
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIA Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/99/079,030
PILING DATE: Concurrently Herewith
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: MCMillian, Nabeela R.
REGISTRATION NUMBER: P-43,363
REFERENCE/DOCKET NUMBER: ARG:003
TELECOMMUNICATION INFORMATION:
TELEPHONE: 512/418-3000
TELEPHONE: 512/418-3000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                      Patent No. 6635623
GENERAL INFORMATION:
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INFORMATION FOR SEQ ID NO: 223:
SEQUENCE CHARACTERISTICS:
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APPLICANT: Guever
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: PT C PC-DOS/MS-DOS
SOFTMARE: PATENTIA Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/079.030
FILING DATE: Concurrently Herewith
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APPLICANT: Moore, Paul J.
TITLE OF INVENTION: LIPOPROTEINS AS NUCLEIC ACID DELIVERY
TITLE OF INVENTION: VECTORS FOR TRANSFECTION OF EUKARYOTIC CELLS
NUMBER OF SEQUENCES: 229
CORRESPONDENCE ADDRESS:
ADDRESSEE: Arnold, White & Durkee
                                                                                                                                                                                                                                                                                 NUMBER OF SEQUENCES: 2
                                                                                                                                                                                                                                                                                                                       TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Guevera, Jr., Juan G. APPLICANT: Hoogeveen, Ron C. APPLICANT: Moore, Paul J.
                                                                                                                                                                                                        STREET: F...
CITY: Houston
Taxas
                                                                                                                                                                 STATE: Texas
COUNTRY: USA
ZIP: 77210
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ZIP: 77210
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TOPOLOGY: li
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                                                                                                                                                                                                                                                               Arnold, White & Durkee
                                                                                                                                                                                                                                                                                                                       LIPOPROTEINS AS NUCLEIC ACID DELIVERY VECTORS FOR TRANSFECTION OF EUKARYOTIC CELLS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100.0%; Score 54; DB 4; Length 420; 100.0%; Pred. No. 0.018;
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US-09-180-422B-27
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                                                                                                                                                                                                                                        NAME: SADOFF, B.J.

REGISTRATION NUMBER: 3663
REFERENCE/DOCKET NUMBER: 117
TELECOMMUNICATION INFORMATION:
TELEPHONE: 7038164000
TELEPAX: 7038164100
INFORMATION FOR SEQ ID NO: 27:
SEQUENCE CHARACTERISTICS:
                                     Matches
                                                   Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 27, Application US/09180422B
Patent No. 6444644
GENERAL INFORMATION:
APPLICANT: BRUCKDORFER, KARL R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTORNEY/AGENT INFORMATION:
NAME: McMillian, Nabeela R.
REGISTRATION NUMBER: P-43,36:
REFERENCE/DOCKET NUMBER: ARAC
TELECOMMUNICATION INFORMATION:
TELEPHONE: 512/418-3000
                                                                                                                                                                                                                                                                                                                                                                                         ZIP: 22201

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/180,422B

FILING DATE: 07-Dec-1998

CLASSIFICATION: <Unknown>

ATTORNEY/AGENT INFORMATION:

ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity 100.0%;
hes 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TOPOLOGY: 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 840 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CLASSIFICATION:
                                                                                                                             TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 27:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CORRESPONDENCE ADDRESS:
ADDRESSEE: NIXON & VANDERHYE, P.C.
STREET: 1100 NORTH GLEBE ROAD, 8TH FLOOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION: ANTICOAGULANT PEPTIDE FRAGMENTS DERIVED FROM APOLIPOPROTEIN B-100
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                                     11;
 1 TTRLTRKRGLK 11
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                                                                                                                                                                                     TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STATE: VA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CITY: ARLINGTON
                                                                                                                                                                                                                            LENGTH: 4536 amino acids
                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                     100.0%; Score 54; DB 4; 100.0%; Pred. No. 0.2;
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                                     Mismatches
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                                                                                                                                                                                                                                                                                                                                          117-268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 4; Length 840,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                      Length 4536;
                                     Indels
                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0,
                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
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RESULT 14 US-09-079-030-1

Patent No.

, Application US/09079030 6635623

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3357 TTRLTRKRGLK 3367

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RESULT 15
US-09-108-006C-1
                                                                                                                                                                                                                                                                                                                                                                       문
                                                                                                                  Sequence 1, Application US/09108006C
Patent No. 6524613
GENERAL INFORMATION:
APPLICANT: Steer, Clifford J.
Kren, Betsy T.
Bandyopadhyay, Paramita
Roy-Chowdhury, Jayanta
NUMBER OF INVENTION: Hepatocellular Chimeraplasty
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      )
US-09-079-030-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATTORNEY AGENT INFORMATION:

NAME: MCM111ian, Nabcela R.

REGISTRATION NUMBER: P-43,363

REFERENCE LOCKET NUMBER: ARAG:003

TELECOMMUNICATION INFORMATION:

TELEPHONE: 512/4748-3000

TELEPAX: 512/4747577

INFORMATION FOR SEQ ID NO: 1:

SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Guevera, Jr., Juan G.
APPLICANT: Hoogeveen, Ron C.
APPLICANT: Hoogeveen, Paul J.
TITLE OF INVENTION: LIPOPROTEINS AS NUCLEIC ACID DELIVERY
NUMBER OF SEQUENCES: 229
CORRESPONDENCE ADDRESS:
ADDRESS:
ADDRESS:
ATROID, White & Durkee
STREET: P.O. Box 4433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
EXPLICATION NUMBER: US/09/079,030
FILING DATE: Concurrently Herewith
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%; Score 54; DB 4; Length 4536; Local Similarity 100.0%; Pred. 0.02; Pred. 0.02; Pred. 0.02; Pred. 0; Mismatches 0. 17461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: amino acid
                                                                                                          CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                      1 TTRLTRKRGLK 11
|||||||||
3357 TTRLTRKRGLK 3367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STATE: Texas
COUNTRY: USA
ZIP: 77210
ADDRESSEE: Kimeragen, Inc.
STREET: 300 Pheasant Run
CITY: Newtown
STATE: PA
COUNTRY: USA
ZIP: 18940
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4536 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        USA
                                                                                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                               Indels
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                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                       0;
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Search completed: January 12, 2005, 13:33:16 Job time : 26.9032 secs

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0,

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INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 4563 amino acids
TYPE: amino acids
TYPE: amino acids
STRANDENDENESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 1:
US-09-108-006C-1
                                                                       Query Match 100.
Best Local Similarity 100.
Matches 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/054,288
FILING DATE: 30-APR-1997
APPLICATION NUMBER: 60/054,837
FILING DATE: 05-AUG-1997
APPLICATION NUMBER: 60/064,996
FILLING DATE: 10-NOV-1997
APPLICATION NUMBER: 60/074,497
FILING DATE: 12-EB-1998
APPLICATION NUMBER: PT US 98/08834
FILING DATE: 12-APR-1998
APPLICATION NUMBER: PT US 98/08834
FILING DATE: 130-APR-1998
APPLICATION NUMBER: 9218
REFERENCE-100KET NUMBER: 29258
REGISTRATION NUMBER: 7991-015-999
TELEPONE: 215-504-4444
TELEPONE: 215-504-4444
3384 TTRLTRKRGLK 3394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US/09/108,006C FILING DATE: 30-JUN-1992 CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IEM COmpatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
                                     TTRLTRKRGLK 11
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                                                                                           100.0%; Score 54; 100.0%; Pred. No.
                                                                                0
                                                                       Mismatches
                                                                                                  DB 4; Length 4563;
                                                                       ,
                                                                  Indels
                                                                ٥,
                                                          Gaps
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GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein - protein search, using sw model

Run on:
January 12, 2005, 13:31:02; Search time 88.3548 Seconds
(without alignments)
44.980 Million cell updates/sec
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Title: US-10-657-404A-2
Perfect score: 54
Sequence: 1 TTRLTRKRGLK 11
Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5
Searched: 1608061 seqs, 361289386 residues
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Total number of hits satisfying chosen parameters: 1608061
Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 10%

Maximum Match 100%

Listing first 45 summaries

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Database: Published Applications AA:*

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ALIGNMENTS

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

_6/ptodata/1/pubpaa/US60_PUBCOMB.pep:*

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|---|---------------|-------------|----------------|-----------------------|----|---------------------|-------------|
| | ა ⊢ | 51 U | 100.0 | 11 | 17 | US-10-657-404A-2 | |
| | ω | 54 | 100.0 | 13 | 9 | US-09-269-533A-4 | |
| | 4. | 54 | 100.0 | 13 | 17 | US-10-657-404A-4 | |
| | ഗ | 54 | 100.0 | 22 | ဖ | US-09-269-533A-5 | |
| | σ | 54 | 100.0 | 22 | 9 | US-09-269-533A-6 | |
| | 7 | 54 | 100.0 | 22 | 17 | US-10-657-404A-5 | |
| | 89 | 54 | 100.0 | 22 | 17 | US-10-657-404A-6 | |
| | 9 | 54 | 100.0 | 25 | 17 | US-10-657-404A-9 | |
| | 10 | 54 | 100.0 | 34 | 15 | US-10-333-313-1 | |
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| | 12 | 54 | 100.0 | 3000 | 16 | US-10-741-601-431 | |
| | 13 | 54 | 100.0 | 4563 | ø | US-09-870-759-128 | |

| 45 | 44 | 43 | 42 | 41 | 40 | 39 | 38 | 37 | 36 | 35 | 34 | 33 | 32 | 31 | 30 | 29 | 28 | 27 | 26 | 25 | 24 | 23 | 22 | 21 | 20 | 19 | 18 | 17 | 16 | 15 | 14 |
|-----------------|-----------------|-----------------|-----|-----------------|-------------------|---------|------------|-------|-----------------|-----------------|-------------------|-------------|-----------------|-----------------|-----------------|------------|--------------------|--------------------|--------------------|------------|--------------|--------------|----------|-------|------------------|----------|-------------------|----------|-------------------|--------------------|-------------------|
| 43 | 43 | 43 | 44 | 44 | 44 | 44 | 44 | 44 | 44 | 44 | 44 | 44 | 44 | 44 | 44 | 44 | 45 | 45 | 45 | 45 | 45 | <u>4</u> 5 | 45 | 49 | 49 | 54 | 54 | 54 | 54 | 54 | 54 |
| 79.6 | 79.6 | ٠ | • | | | 81.5 | | 81.5 | 81.5 | ٠ | ٠ | • | | 81.5 | 81.5 | | • | 83.3 | | 83.3 | ٠ | ٠ | 83.3 | 90.7 | ٠ | ٠ | 100.0 | ٠ | • | 100.0 | 100.0 |
| 10 | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 9 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 4563 | 4563 | 4563 | 4563 | 4563 | 4563 |
| 9 | 9 | 9 | 17 | 14 | 10 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | ø | 9 | 9 | 17 | 10 | 10 | 10 | 9 | ø | 9 | 9 | 9 | 9 | 17 | 16 | 16 | 14 | 10 | 10 |
| US-09-823-418-4 | US-09-823-418-3 | US-09-823-418-2 | 657 | US-10-358-594-2 | US-09-931-375A-76 | 9-398-9 | 09-269-533 | 09-82 | US-09-822-965-9 | US-09-822-965-7 | -09-822-965 | -09-823-418 | US-09-823-418-9 | US-09-823-418-7 | US-09-823-418-5 | 0-657-4042 | US-09-572-404B-729 | US-09-572-404B-635 | US-09-572-404B-595 | -09-822-96 | -09-822-965- | -09-823-418- | -09-823- | -965- | US-09-823-418-20 | <u>.</u> | US-10-741-601-433 | -10-741- | US-10-403-902A-32 | US-09-751-708A-128 | US-09-802-640-32 |
| 4 | ω , | 2, 1 | w | 2 | e 76, | 2, 1 | ω - | 11, | e 9, | 7, | Sequence 5, Appli | 11, | φ, | 7, | 5 | Θ, | 72 | | e 59 | | ۳, | ر. ص | 1, | 20, | 20, Ag | e 124, | Sequence 433, App | e 432, | 32, | 128, | Sequence 32, Appl |

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                                ફ
                                                                                                                                                           ; NAME/KBY: misc feature
; LOCATION: ()..()
; OTHER INFORMATION: Apo B binding site sequence
US-09-269-533A-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 1
US-09-269-533A-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 2, Application US/09269533A Patent No. US20020147304A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                          PRIOR FILING DATE: 1996-09-27
NUMBER OF SEQ ID NOS: 7
SOFTWARE: PatentIn version 3.0
SEQ ID NO 2
                                                                           Query Match
Best Local Similarity
Matches 11; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Baillie, George
TITLE OF INVENTION: NO. US20020147304A1-Naturally Occurring Lipoprotein Particle
FILE REFERENCE: P07865US
CURRENT APPLICATION NUMBER: US/09/269,533A
CURRENT FILING DATE: 1999-06-01
PRIOR APPLICATION NUMBER: PCT/GB97/02610
PRIOR APPLICATION NUMBER: D97-09-25
PRIOR APPLICATION NUMBER: GB 9620153.8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: University of Strathclyde APPLICANT: Halbert, Gavin APPLICANT: Owens, Moira
                                                                                                                                                                                                                                             TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
                                                                                                                                                                                                                                                                                                         ENGTH: 11
                                                                           ch 100.0%; Score 54; DB 9; Similarity 100.0%; Pred. No. 0.0032; 11; Conservative 0; Mismatches 0
TTRLTRKRGLK 11
                                  TTRLTRKRGLK 11
                                                                                                                  Length 11;
                                                                               Indels
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                                                                           Gaps
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RESULT 2 US-10-657-404A-2

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CURRENT FILING DATE: 1999-06-01
PRIOR APPLICATION NUMBER: US/09/269,533A
PRIOR APPLICATION NUMBER: PCT/GB97/02610
PRIOR FILING DATE: 1997-09-25
PRIOR APPLICATION NUMBER: GB 9620153.8
PRIOR FILING DATE: 1996-09-27
NUMBER OF SEQ ID NOS: 7
SOFTWARE: Patentin version 3.0
         Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-269-533A-4
                                                                                                                                                                                                                                                                      SEQ ID NO 4
                             LOCATION: ()...()
OTHER INFORMATION: Synthesised peptide analogue of the Apo B 100 binding site
NAME/KBY: misc_feature
LOCATION: ()...()
OTHER INFORMATION: Retinoic acid linked at N-terminus of peptide analogue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME/KEY: misc_feature; OTHER INFORMATION: Apo B binding site sequence US-10-657-404A-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Patent No. US20020147304A1
GENERAL INFORMATION:
                                                                                                                                                                                           TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                    NAME/KEY: misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: University of Strathclyde APPLICANT: Halbert, Gavin APPLICANT: Owens, Moira
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: PCT/GB97/02610
PRIOR PILLING DATE: 1997-09-25
PRIOR APPLICATION NUMBER: GB 9620153.8
PRIOR FILLING DATE: 1996-09-27
SOFTWARE: PATENTIN Version 3.1
PRIOR: PATENTIN Version 3.1
PRIOR: PATENTIN VERSION 3.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                              PLICANT: Halbert, Gavin
PLICANT: Owens, Moira
PLICANT: Owens, Moira
PRICANT: Baillie, George
ITLE OF INVENTION: No. US20020147304A1-Naturally Occurring Lipoprotein Particle
ILE REFERENCE: P07885US
ILE REFERENCE: NOTWIERE: US/09/269,533A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Publication US/10657404A
GENERAL INFCRMATION:
APPLICANT: University of Strathclyde
APPLICANT: Halbert, Gavin
APPLICANT: Owens, Moir-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Baillie, George
TITLE OF INVENTION: Non-Naturally Occurring Lipoprotein Particle
FILE REFERENCE: P07885US-CIP
CURRENT APPLICATION NUMBER: US/10/657,404A
CURRENT FILING DATE: 2003-09-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LENGTH: 11
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 TTRLTRKRGLK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity 100.0%;
11; Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTRLTRKKGLK 11
       100.0%;
Score 54; DB 9;
Pred. No. 0.0038;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 54; DB 17;
Pred. No. 0.0032;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
       Length 13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0,
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SUPTWARE: PatentIn version 3.0
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Best Local Similarity 100.0.
Matches 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                    US-09-269-533A-5
                                                                                                                                                                                                                                                                                                                                                                                                                                       DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                              APPLICANT: Owens, Moira
APPLICANT: Baillie, George
TITLE OF INVENTION: No. US20020147304A1-Naturally Occurring Lipoprotein Particle
FILE REFERENCE: P07085US
CURRENT APPLICATION NUMBER: US/09/269,533A
CURRENT FILING DATE: 1999-06-01
PRIOR APPLICATION NUMBER: PCT/GB97/02610
PRIOR APPLICATION NUMBER: PCT/GB97/02610
PRIOR FILING DATE: 1997-09-25
PRIOR FILING DATE: 1997-09-25
PRIOR FILING DATE: 1997-09-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-657-404A-4
                                                                                                                                                                                                                                                                                                                             GENERAL
                                                                                                                                                                                                                                                                                                                                         Sequence 5 Patent No.
                            LENGTH: 22
TYPE: PRT
ORGANISM: Artificial Sequence
NAME/KEY: misc feature LOCATION: ()...()
                                                                                                                                                                                                                                                                  APPLICANT: Halbert, Gavi
APPLICANT: Owens, Moira
                                                                                                                                                                                                                                                                                 APPLICANT: University of Strathclyde
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQ ID NO 4
LENGTH: 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME/KEY: misc feature
OTHER INFORMATION: Synthesised peptide analogue of the Apo B 100 binding site
FEATURE:
NAME/KEY: misc_feature
OTHER INFORMATION: Retinoic acid linked at N-terminus of peptide analogue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQ ID NOS: 9
SOFTWARE: PatentIn version 3.1
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ORGANISM: Artificial Sequence
FEATURE:
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PRIOR FILING DATE: 1996-09-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: PCT/GB97/02610 PRIOR FILING DATE: 1997-09-25
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CURRENT FILING DATE: 2003-09-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Baillie, George
TITLE OF INVENTION: Non-Maturally Occurring Lipoprotein Particle
FILE REFERENCE: P07885US-CIP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: University of Strathclyde
APPLICANT: Halbert, Gavin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  10-657-404A-4
                                                                                                                                                                                                                                                                                                                      INFORMATION
                                                                                                                                                                                                                                                                                                                             5, Application US/09269533A
o. US20020147304A1
                                                                                                                                                                                                                                                                                                                                                                                                                          2 TTRLTRKRGLK 12
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No. US20040235730A1
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Owens, Moira
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                                                                                                                                                                            Sequence 5, Application US/10657404A Publication No. US20040235730A1 GENERAL INFORMATION:
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APPLICANT: University of Strathclyde
APPLICANT: Halbert, Gavin
                                                                                                                                                                                                                                                                                                                                                                                             Matches
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APPLICANT: University of Strathclyde
APPLICANT: Halbert, Gavin
APPLICANT: Owens, Moira
APPLICANT: Owens, Moira
APPLICANT: Bailie, George
TITLE OF INVENTION: Non-Naturally Occurring Lipoprotein Particle
FILE REFERENCE: P07885US-CIP
CURRENT APPLICATION NUMBER: US/10/657,404A
CURRENT FILING DATE: 2003-09-08
PRIOR APPLICATION NUMBER: PCT/GB97/02610
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILE REFERENCE: P07885US
CURRENT APPLICATION NUMBER: US/09/269,533A
CURRENT FILING DATE: 1999-06-01
PRIOR APPLICATION NUMBER: PCT/GB97/02610
PRIOR FILING DATE: 1997-09-25
PRIOR PPLICATION NUMBER: GB 9620153.8
PRIOR APPLICATION NUMBER: GB 9620153.8
PRIOR FILING DATE: 1996-09-27
NUMBER OF SEQ ID NOS: 7
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Patent No. US20020147304A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Baillie, George
TITLE OF INVENTION: No. US20020147304Al-Naturally Occurring Lipoprotein Particle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LENGTH: 22

TYPE: PRT

ORGANISM: Artificial Sequence

FEATURE:

NAME/KEY: misc_feature

LOCATION: ()..()

OTHER INFORMATION: Synthesised peptide analogue of the Apo

NAME/KEY: misc_feature

LOCATION: ()..()

LOCATION: ()..()

LOCATION: ()..()
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LOCATION: ()..()
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY: misc feature LOCATION: ()..()
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Owens, Moira
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Pred. No.
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US-10-657-404A-9
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US-10-657-404A-6
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     Sequence 9, Application US/10657404A Publication No. US20040235730A1
                                                                                                                                                                                              Best Local
Matches 1
                                                                                                                                                                                                                                  Query Match
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PILE REFERENCE: P07885US-CIP
CURRENT APPLICATION NUMBER: US/10/657,404A
CURRENT FILING DATE: 2003-09-08
PRIOR APPLICATION NUMBER: PCT/GB97/02610
PRIOR FILING DATE: 1997-09-25
PRIOR APPLICATION NUMBER: GB 9620153.8
PRIOR FILING DATE: 1996-09-27
NUMBER OF SEQ ID NOS: 9
                                                                                                                                                                                                                                                                                                                                 SOFTWARE: PatentIn version 3.1
SEQ ID NO 6
LENGTH: 22
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SEQ ID NO 5
LENGTH: 22
TYPE: PRT
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TITLE OF INVENTION: Non-Naturally Occurring
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PRIOR APPLICATION NUMBER: GB:
PRIOR FILING DATE: 1996-09-27
NUMBER OF SEQ ID NOS: 9
                                                                                                                                                                     FEATURE:
NAME/KEY: misc_feature
OTHER INFORMATION: Retinoic acid linked at N-terminus of peptide
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NAME/KEY: misc feature
OTHER INFORMATION: Synthesised peptide analogue of the Apo B 100
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NAME/KEY: misc feature
OTHER INFORMATION: Synthesised peptide analogue of the Apo B 100 binding site
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OTHER INFORMATION: Cholesterol linked at C-terminus of
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Local Similarity 100.0%;
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                    TTRLTRKRGLK 11
TTRLTRKRGLK 16
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Owens, Moira
                                                                      100.0%; Score 54; larity 100.0%; Pred. No. Conservative 0; Mismatch
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Pred. No. 0.0065;
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RESULT 11
US-09-864-761-46837
; Sequence 46837, Application US/09864761
                                                                                                                                              Query Match
Best Local Similarity
Watches 11; Conserve
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APPLICANT: Yla-Herttuala, Seppo
TITLE OF INVENTION: Peptides and Their Use in Assays for Cardiovascular Disease
FILE REPERENCE: GJR-6363
CURRENT PLICATION NUMBER: US/10/333,313
CURRENT FILING DATE: 2003-01-15
PRIOR APPLICATION NUMBER: PCT/GB01/03212
PRIOR APPLICATION UNDER: PCT/GB01/03212
NUMBER OF SEQ ID NOS: 5
SOFTWARE: PatentIn version 3.1
TENCTU. 24
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; OTHER INFORMATION: Pyrene butyric acid linked at N-terminus of peptide analogue
US-10-657-404A-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 1, Application US/10333313
Publication No. US20040091934A1
GENERAL INFORMATION:
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Best Local &
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ORGANISM: Artificial Sequence
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APPLICANT: University of Strathclyde
APPLICANT: Halbert, Gavin
APPLICANT: Owens, Moira
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TITLE OF INVENTION: Non-Naturally Occurring Lipoprotein Particle
FILE REFERENCE: P07885US-CIP
CURRENT APPLICATION NUMBER: US/10/657,404A
CURRENT FILING DATE: 2003-09-08
PRIOR APPLICATION NUMBER: PCT/GB97/02610
PRIOR APPLICATION NUMBER: CT/GB97/02610
PRIOR FILING DATE: 1997-09-25
PRIOR APPLICATION NUMBER: GB 9620153.8
PRIOR APPLICATION NUMBER: GB 9620153.8
NUMBER OF SEQ ID NOS: 9
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OTHER INFORMATION: Cholesterol linked at C-terminus of peptide
FEATURE:
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TYPE PT
ORGANIEM: Artificial Sequence
FEATURE:
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                                                                                                                       TTRLTRKRGLK 11
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nilarity 100.0%;
Conservative 0
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Pred. No. 0.01;
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Pred. No. 0
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0.0073;
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RESULT 12 US-10-741-601-431

Sequence

431,

Application US/10741601

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HYPLICAWI: CHEM, WEIBRENG

TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID

FILE REFERENCE: Accomica-X-1

CURRENT APPLICATION NUMBER: US/09/864,761

PRIOR APPLICATION NUMBER: US 60/180,312

PRIOR APPLICATION NUMBER: US 60/207,456

PRIOR APPLICATION NUMBER: US 60/207,456

PRIOR FILING DATE: 2000-05-26

PRIOR FILING DATE: 2000-08-03

PRIOR APPLICATION NUMBER: US 9/632,366

PRIOR FILING DATE: 2000-08-03

PRIOR APPLICATION NUMBER: US 9/632,366

PRIOR FILING DATE: 2000-01-04

PRIOR FILING DATE: 2000-10-9-27

PRIOR APPLICATION NUMBER: PCT/US01/00666

PRIOR APPLICATION NUMBER: PCT/US01/00667

PRIOR APPLICATION NUMBER: PCT/US01/00669

PRIOR APPLICATION NUMBER: PCT/US01/00669

PRIOR APPLICATION NUMBER: PCT/US01/00668

PRIOR APPLICATION NUMBER: PCT/US01/00668

PRIOR APPLICATION NUMBER: PCT/US01/00668

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PRIOR APPLICATION NUMBER: PCT/US01/00666

PRIOR APPLICATION NUMBER: PCT/US01/00666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: US 09/608,408
PRIOR FILING DATE: 2000-06-30
PRIOR APPLICATION NUMBER: US 09/774,203
PRIOR FILING DATE: 2001-01-29
NUMBER OF SEQ ID NOS: 49117
SOPTWARE: Annomax Sequence Listing Engine
SEQ ID NO 46837
LENGTH: 343
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                                                                                                                                                                                                                           ; OTHER INFORMATION: MAP TO ACO10872.3; OTHER INFORMATION: EXPRESSED IN ADULT LIVER, SIGNAL = 5.7; OTHER INFORMATION: EXPRESSED IN FETAL LIVER, SIGNAL = 26; OTHER INFORMATION: EST_HUMAN HIT: AI174984.1, EVALUE 2.00e-60; OTHER INFORMATION: SWISSPROT HIT: P04114, EVALUE 0.00e+00 US-09-864-761-46837
                                                                                                                     Matches
                                                                                                                                                                     Query Match
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PRIOR APPLICATION NUMBER: US
                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM: Homo sapiens FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: PRT
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APPLICATION NUMBER: US 60/234,687
      168
                                          1 TTRLTRKRGLK 11
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                                                                                                                                          Similarity
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TTRLTRKRGLK 178
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Pred. No. 0.1;
0; Mismatches
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CURRENT APPLICATION NUMBER: US/09/870,759
CURRENT FILING DATE: 2002-01-14
PRIOR APPLICATION UNMBER: US 60/208,128
PRIOR FILING DATE: 2000-05-30
NUMBER OF SEO ID NOS: 166
SOFTWARE: Pattentin version 3.1
SEQ ID NO 128
LENGTH: 4563
TYPE: PRT
ORGANISM: Homo sapiens
US-09-870-759-128
                                                            Sequence 32, Application US/09802640

Publication No. US20030036057A1

GENERAL INFORMATION:
APPLICANT: Braun, Andreas
APPLICANT: Bonaal Aruna
APPLICANT: Kleyn Patrick
TITLE OF INVENTION: GENES AND POLYMORPHISMS ASSOCIATED WITH
TITLE OF INVENTION: CARDIOVASCULAR DISEASE AND THEIR USE
FILE REFERENCE: 24736-2048

CURRENT APPLICATION NUMBER: US/09/802,640

CURRENT FILING DATE: 2001-03-09

NUMBER OF SEQ ID NOS: 122

SOFTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 32
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US-09-870-759-128
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; ORGANISM: Homo sapiens
US-10-741-601-431
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GENERAL INFORMATION:

APPLICANT: CARGILL, Michele et al.

TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
TITLE OF INVENTION: STENOSIS, METHODS OF DETECTION AND USES THEREOF
FILE REFERENCE: CL001500
CURRENT APPLICATION NUMBER: US/10/741,601
CURRENT FILING DATE: 2003-12-22
NUMBER OF SEQ ID NOS: 26415
SOFTMARE: FBSESEQ for Windows Version 4.0
SEQ ID NO 431
LENGTH: 3000
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Best Local Similarity 100.0%; Pred. No. 1.3;
Matches 11; Conservative 0; Mismatches 0
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Best Local Similarity 100.0%;
Matches 11; Conservative 0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR TREATMENT OF NEOPLASTIC DISEASE FILE REFERENCE: 870759
LENGTH: 4563
TYPE: PRT
ORGANISM: Homo sapien
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Pred. No. 0.88;
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APPLICANT: TERMAN, David S
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR
FILE REFERENCE: 751708
CURRENT APPLICATION NUMBER: US/09/751,708A
CURRENT FILING DATE: 2002-10-15
PRIOR APPLICATION NUMBER: US 60/173,371
PRIOR FILING DATE: 1999-12-28
NUMBER OF SEQ ID NOS: 166
SOFTWARE: PatentIn version 3.1
SEQ ID NO 128
LENGTH: 4563
TYPE: PRT
ORGANISM: Homo sapiens
US-09-751-708A-128
                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 15
US-09-751-708A-128
; Sequence 128, Application US/09751708A
; Publication No. US20030157113A1
; GENERAL INFORMATION:
; GENERAL INFORMATION:
Search completed: January 12, 2005, 13:52:50 Job time: 89.3548 secs
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Pred. No. 1.3;
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Copyright

GenCore version 5.1.6 (c) 1993 - 2005 Compugen Ltd

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Maximum Match 100%
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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Match
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| N | N | N | N | N | N | N | μ | N | N | N | N | N | N | N | N |
| T01873 | A53305 | T41529 | 833822 | S12607 | T21018 | T37459 | S34191 | C86212 | S40051 | S48288 | T29604 | AB3538 | AE3532 | E72480 | A87301 |
| hypothetical prote | pentose-5-phosphat | | salivary glue prot | salivary glue prot | hypothetical prote | ribonucleotide red | sulfite reductase | hypothetical prote | starch synthase (E | probable phosphopr | hypothetical prote | transposase BMEIIO | transposase BMEIIO | hypothetical prote | MutT/nudix family |

ALIGNMENTS

apolipoprotein B - crab-eating macaque (fragment)
C;Species: Macaca fascicularis (crab-eating macaque)
C;Date: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 09-Jul-2004

S32802

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k; Fape, M.E.; Castle, C.K.; Murray, R.W.; Funk, G.M.; Hunt, C.E.; Marotti, K.R.; Melchic Biochim. Biophys. Acta 1086, 326-334, 1991
A;Title: Apo B metabolism in the cynomologus monkey: evidence for post-transcriptional re A;Reference number: S32802; MUID:92075708; PMID:1742325
A;Accession: S32802
A;Molecule type: mRNA
A;Residues: 1-11,15-2539,'S',2541-3823,'R',3825-4563 <CLA>
A;Roeta: 1109-Asg was also found
R;Knott, T.J.; Wallis, S.C.; Powell, L.M.; Pease, R.J.; Lusis, A.J.; Blackhart,
Nucleic Acids Res. 14, 7501-7503, 1986
                                                                                                                                                                                     A; Molecule type: DNA
A; Residues: 1-617,'A', 619-1929,'F', 1931-3318,'D', 3320-3426,'T', 3428-3431,'Q', 3433-3731,'
A; Residues: 1-617,'A', 619-1929,'F', 1931-3318,'D', 3320-3426,'T', 3428-3431,'Q', 3433-3731,'
A; Cross-references: UNIPROT: P04114; UNIPROT: P78482; UNIPROT: P78479; UNIPROT: Q9UMNO; UNIP
R; Cladaras, C:; Hadzopoulou-Cladaras, M.; Nolte, R.T.; Atkinson, D.; Zannis, V.I.
EMBO J. 5, 3495-3507, 1986
A; Title: The complete sequence and structural analysis of human apolipoprotein B-100: re
A; Reference number: A91058; MUID: 87161758; PMID: 3030729
A; Accession: A25679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A;Title: DNA sequence of the human apolipoprotein B gene. A;Reference number: A27850; MUID:88003974; PMID:3652907 A;Accession: A27850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        C;Species: Homo sapiens (man)
C;Species: Homo sapiens (man)
C;Date: 28-Dec-1987 #sequence revision 28-Dec-1987 #text change 09-Jul-2004
C;Accession: A27850; A25679; Ā25263; A25267; A25266; A24320; A24684; A23817; A25774; A26
4452; I61909; I59510; I39474; I39469; I84624; I37179; P80058
R;Ludwig, B.H.; Blackhart, B.D.; Pierotti, V.R.; Caiati, L.; Fortier, C.; Knott, T.; Sco
DNA 6, 363-372, 1987
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Status: preliminary
A;Molecule type: mRNA
A;Residuse: 1-596 <APAP>
A;Cross-references: UNIPROT:Q28473; EMBL:X15737; NID:g38047; PIDN:CAA33755.1; PID:g93012
C;Superfamily: apolipoprotein B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       apolipoprotein B-100 precursor - human
N;Contains: apolipoprotein B-26; apolipoprotein B-48; apolipoprotein B-74
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Pred. No. 0.015;
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A;Reference number: A91565; MUID:87191999; PMID:2883086

A;Recession: A26533

A;Molecule type: mRNA
A;Residues: 1282-2721,2742-3290, 'L',3292-3336,'N',3338-3948,'F',3950-3963,'Y',3965-4180,
A;Cross-references: GB:M15421; NID:g178817; PIDN.AAA51758.1; PID:g178818
R;Hardman, D. A; Protter, A.A; Chen, G.C.; Schilling, J.W.; Sato, K.Y.; Lau, K.; Yamana Biochemistry 26, 5478-5486, 1997
A;Ritle: Structural comparison of human apolipoproteins B-48 and B-100.
A;Accession: A29671; MUID:88050832; PMID:3676265
A;ACCESSION: .....
A;MOlecule type: mRNA
A;Residues: 1671-2323,'PYW',2327-2352,'H',2354-2398 <HAR>
A:Cross-references: GB:M17367; NID:g178731; PIDN:AAA51741.1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A;Molecule type: mRNA
A;Residues: 1-291 <PRO>
A;Cross-references: GB.M12681; NID:9178797; PIDN:AAA51753.1;
R;Ceeb, S.S.; Motulsky, A.G.; Albers, J.J.
Proc. Natl. Acad. Sci. U.S.A. 82, 4983-4986, 1985
A;Title: A partial cDNA clone for human apoliprotein B.
A;Accession: A25774; MUID:85270450; PMID:3860836
A;Maccession: A25774
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A;Residues: 485-617,'A',619-1044 <LA2>
A;Cross-references: GB:M12480, NID:g178791; PIDN:AAA51751.1; PID:g178792
Proc. Natl. Acad. Sci. U.S.A. 83, 1467-1471, 1986
A;Title: Isolation of a cDNA clone encoding the amino-terminal region of h
A;Accession: A23817
A;Accession: A23817
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A;Roslidues: 1-97,'I',99-617,'A',619-941,'YYIWSLPPKP',951-1138,'PTGRLPNCFSNGLICYSLWLHSFOH
A;Roslidues: 1-97,'I',99-617,'A',619-941,'YYIWSLPPKP',951-1138,'PTGRLPNCFSNGLICYSLWLHSFOH
A;Cross-references: GB.M14081; NID:g178795; PIDN:AAA51752.1; PID:g553189
R;Cross-references: GB.M14081; NID:g1795; PIDN:AAA51752.1; PID:g553189
Proc. Natl. Acad. Sci. U.S.A. 82, 8340-8344, 1985
Proc. Natl. Acad. Sci. U.S.A. 82, 8340-8344, 1985
A;Title: Human apolipoprotein B-100: cloning, analysis of liver mRNA, and assignment of
A:Reference number: A24684; MUID:86094221; PMID:3001697
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCUSTANCE TYPE: mRNA
1, Residues: 709-791, 'SSSWKAASHGCPHSAGD', 810-906 <DEE>
1, Cross references: GB:K03175; NID:9178821; PIDN:AAA51759.1;
1, Cross references: GB:K03175; Olofsson, S.O.; Bjursell, G.
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A;Residues: 1-97, 'I', 99-328,'V',330-644,'I',646-918,'P',920-3318,'D',3320-3426,'T',3428-4132,'G',4134-4180,'E',4182-4563 <CHE>
9-4132,'G',4134-4180,'E',4182-4563 <CHE>
A;Cross-references: GB:J02610; WD:g478803; PIDN:AAA35549.1; PID:g178804
A;Note: a total of 2366 residues were confirmed by direct sequencing of tryptic peptides R;Protter, A.A.; Hardman, D.A.; Sato, K.Y.; Schilling, J.W.; Yamanaka, M.; Hort, Y.J.; P.
Proc. Matl. Acad. Sci. U.S.A. 83, 5678-5682, 1986
A;Title: Analysis of cDNA clones encoding the entire B-26 region of human apolipoproteir A;Reference number: A24320; MUID:86287319; PMID:3461454
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A;Title: The complete cDNA and an ino acid sequence of human A;Reference number: A92556; MUID:87008488; PMID:3759943
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A;Residues: 1-617,'A',619-703,'P',705-792,'R',794-1270,'S',1272-1866,'G',1868-2036,'N'
4189-4220,'M',4222-4563 <LAW>
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                                              PID:g178732
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M.; Li,
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i, W.H.;
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A;Accession: A28002
A;Molecule type: mRNA
A;Residues: 2129-2179,2181-2235 <HA2>
A;Cross-references: GBM.18471
A;Experimental source: intestine
A;Note: this mRNA from intestine includes a stop codon crea
R;Mohrablan, M; Schumaker, V.N.; Fareed, G.C.; West, R; J
Nucleic Acids Res. 13, 6937-6953, 1985
A;Title: Human apolipoprotein B: identification of cDNA clo
A;Reference number: A24269; MUID:86041888; PMID:3903660
                                                                                                                                                  A; Molecule type: mRNA
A; Residues: 2169-2179 <hOS>
A; Note: the sequence shown represents the carboxyl end of apolipoprote A; Note: two RNA species, 14.1kb and 7.5kb in length, were isolated from the codes the 250K apoB-48, CAA encoding 2180-Gln is substituted by Ryang, C.; Kim, T.W.; Weng, S.; Lee, B.; Yang, M.; Gotto Jr., A.M.
Proc. Natl. Acad. Sci. U.S.A. 87, 5523-5527, 1990
A; Reference number: A35783; MUID:90319144; PMID:2115173
A; Contents: disulfide bonds
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A;Molecule type: mRNA
A;Restdues: 3056-3159 <MEH>
A;Restdues: 3056-3159 <MEH>
A;Cross-references: GB:X03045; NID:g28783; PIDN:CAA26850.1; PID:g929609
A;Cross-references: GB:X03045; NID:g28783; PIDN:CAA26850.1; PID:g929609
B;Coss-references: GB:X03045; PID:g929609
B;Coss-references
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A;Rocession: B40133
A;Rolecule type: mRNA
A;Residues: 2165-2179 <CH1>
A;Cross-references: GB:M18036; NID:g178799; PIDN:AAA51754.1; PID:g17A,POte: this mRNA
A;Rotein and a control of the organ-specific mRNA
A;Accession: A40133
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A; Residues: 'N', 3729-3731,'I', 3733-3875,'A', 3877-3948,'F', 3950-3963,'Y', 3965-3982,'S'
A; Cross-references: GB:M12413; NID:g178735; PIDN:AAA51742.1; PID:g178736
R; Chen, S.H.; Habib, G.; Yang, C.Y.; Gu, Z.W.; Lee, B.R.; Weng, S.; Silberman, S.R.; Science 238, 363-366, 1987
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A;Reference number: A24738; MUID:86042646; PMID:2932736
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Biol. Chem. Hoppe-Seyler 367, 1077-1083, 1986
A;Title: Isolation, expression and characterization of a
A;Reference number: A25572; MUID:87076044; PMID:3024665
A;Accession: A25572
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A;Residues: 4219-4337,'S',4339-4563 <PFI>
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A;Title: Molecular cloning of human LDL apolipoprotein B cDNA. Evidence for more than A;Reference number: A90084; MUID:86130855; PMID:3841481
A;Accession: A29287
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A;Residues: 3846-4298 <SHO>
le type: protein
es: 28-41;76-97,'I',99-100;175-193;206-215;239-249;259-266;357-399;455-490;512-
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West, R.; Johnson, D.F.; Kirchgessner,
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A;Contents: annotation; heparin binding and disulfide bond R;Dashti, N.; Lee, D.M.; Mok, T.
Bioshem. Biophys. Res. Commun. 137, 493-499, 1986
A;Title: Apolipoprotein B is a calcium binding protein.
A;Reference number: A90125; MUID:86242245; PMID:3087360
A;Contents: annotation; calcium binding
R;Carlsson, P.; Olofsson, S.O.; Bondjers, G.; Darnfors, C.;
Nucleic Acids Res. 13, 8813-8826, 1985
A;Title: Molecular cloning of human apolipoprotein B cDNA.
A;Reference number: 137178; MUID:86093680; PMID:3841204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A;Contents: annotation; gene structure
R;Wagener, R.; Pfitzner, R.; Stoffel, W.
Biol. Chem. Hoppe-Seyler 368, 419-425, 1987
A;Title: Studies on the organization of the human apolipoprotein B 100 A;Reference number: A90715; MUID:87271140; PMID:2886136
A;Contents: annotation; gene structure
R;Weisgraber, K.H.; Rall Jr., S.C.
J. Biol. Chem. 262, 11097-11103, 1987
A;Title: Human apolipoprotein B-100 heparin-binding sites.
A;Reference number: A92605; MUID:87280197; PMID:3301850
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                                                                                                                                                                                                                       A; Molecule type: DNA
A; Realdues: 1-269 <LAW>
A; Realdues: 1-269 <LAW>
A; Cross-references: UNIPROT: Q60537; UNIPROT: Q60536
C; Superfamily: apolipoprotein B
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C;Accession:
                                                                                                                                                                                                                                                                                                                                                                                                                                                      apolipoprotein B-100 - golden hamster (fragment) C;Species: Mesocricetus auratus (golden hamster) C;Date: 31-Dec-1993 #sequence_revision 31-Dec-19 C;Accession: C60950
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
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A;Residues: 3113,'L',3115-3130,'R',3132-3133,'P',3135-3136,'R' <LE2>
R;Blackhart, B.D.; Ludwig, E.M.; Pierotti, V.R.; Caiati, L.; Onasch, J. Biol. Chem. 261, 15364-15367, 1986
A;Title: Structure of the human apolipoprotein B gene.
A;Reference number: A92564; MUID:87057153; PMID:2946672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A;Title: Human apolipoprotein B: partial amino acid sequence. A;Reference number: A22006; MUID:84208786; PMID:6373369 A;Accession: A22006
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A;Note: cysteines at positions 1112, 1422, 1505, 1662, 3761, 3917, and 4217 have free R;LeBoeuf, R.C.; Miller, C.; Shively, J.E.; Schumaker, V.N.; Balla, M.A.; Lusis, A.J. FEBS Lett. 170, 105-108, 1984
                                                                                                                                                                                                                                                                                                                                                                                                 R;Law, A.; Scott, J.
J. Lipid Res. 31, 1109-1120, 1990
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A; Residues: 873-892, 'K', 894-896 <LEl>
                                                                                                                                                                                            Keywords: atherosclerosis; calcium; cholesterol metabolism; chylomicron;
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                                                                                                                           Query Match
Best Local
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215
                                                                                                 10;
                                                                                                                   Similarity
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                                               TTRLTRKRGLK 11
TSRLTRKRGLK 225
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                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                   92.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%;
                                                                                                                   Score 50;
Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                             31-Dec-1993
                                                                                                                                                                                                                                                                                                                                                  apolipoprotein
PMID:2373961
                                                                                                                      DB 2;
0.044;
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                                                                                                                                           Length 269;
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                                                                                              Gaps
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RESULT 4

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8
                                                                                        apolipoprotein B-100 - chicken (fragment)
C;Species: Gallus gallus (chicken)
C;Date: 31-Dec-1993 #sequence_revision 31-Dec-1993 #text_change 09-Jul-2004
C;Accession: E60950
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  C;Supertamily: apolipoprotein B
C;Keywords: atherosclerosis; calcium;
F;435-445/Region: receptor binding
F;646-656/Region: receptor binding
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A;Note: this is a revision to the sequence from reference JH0101
R;Smith, T.J.; Hautamaa, D.; Maeda, N.
Gene 87, 309-310, 1990
A;Title: Sequence of the putative low-density lipoprotein receptor-binding regions of A;Reference number: JH0101; MUID:90236327; PMID:2332175
A;Contents: annotation
A; Reference number: A; Accession: E60950
                                 A; Title: A cross-species
                                                     R;Law, A.; Scott, J.
J. Lipid Res. 31, 1109-1120, 1990
                                                                                                                                                                             E60950
                                                                                                                                                                                               RESULT 6
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C;Keywords: atherosclerosis; calcium; cholesterol metabolism; chylomicron; glycoprotein
                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Note: authors translated the C; Superfamily: apolipoprotein E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A;Molecule type: mRNA
A;Residues: 1-274 <LAW>
A;Cross-references: UNIPROT:Q7M2U9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Reference number: A60950; A; Accession: A60950
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A; Title: A cross-species comparison of the A; Reference number: A60950; MUID: 90324804;
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J. Lipid Res. 31, 1109-1120, 1990
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C;Species: Mesocricetus auratus (golden hamster)
C;Date: 17-Apr-1993 #sequence_revision 17-Apr-1993 #text_change 09-Jul-2004
C;Accession: JH0102
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                a60950; MUID:90324804;
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Pred. No. 0.66;
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Pred. No. 0
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09-Sep-1994
                  apolipoprotein PMID:2373961
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                                     domain that binds to the LDL
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Conserved hypothetical protein STY3508 [imported] - Salmonella enterica subsp. (C;Species: Salmonella enterica subsp. enterica serovar Typhi A;Note: this species has also been called Salmonella typhi C;Date: 09-Nov-2001 #sequence_revision 09-Nov-2001 #text_change 18-Nov-2002 C;Accession: AH0906 R;Parkhill, J.; Dougan, G.; James, K.D.; Thomson, N.R.; Pickard, D.; Wain, J.; th, T.; Connerton, P.; Cronin, A.; Davis, P.; Davies, R.M.; Dowd, L.; White, N.
                                        A; Authors:
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AH0906
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C;Superfamily: apolipoprotein B
C;Keywords: atherosclerosis; calcium; cholesterol metabolism; chylomicron; glycoprotein;
F;435-445/Region: receptor binding
F;646-656/Region: receptor binding
                                                                                                                                                                                                                                                                                                                                                                                                                                 A;Molecule type: mRNA
A;Residues 427-531,'S',533-700 <LAW>
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A;Accession: D60950
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A;Accession: S33128
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R;Smith, T.; Hautamaa, D.; Maeda, N.
submitted to the EMBL Data Library, May 1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           R;Smith, T.J.; Hautamaa, D.; Maeda, N.
Gene 87, 309-310, 1990
A;Title: Sequence of the putative low-density lipoprotein receptor-binding regions of A;Reference number: JH0101; MUID:90236327; PMID:2332175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    C:Species: Mus musculus (house mouse)
C;Date: 17-Apr-1993 #sequence revision 17-Apr-1993 #text_change 09-Jul-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Cross-references:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;Molecule type: DNA
;Residues: 1-531,'S',533-784 <SM2>
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A; Residues: 1-275 < LA
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Best Local :
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848-852, 2001
Parry, C.; Quail, M.; Rutherford, K.; Simmonds,
                                                                                                                                                                                                                                            646
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A cross-species
                                                                                                                                                                                                                                                          1 TTRLTRKRGLK 11
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9; Conserv
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9; Conserv
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81.8%;
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Pred. No. 1.7;
1; Mismatches
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Pred. No.
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                                                                                                                                                                                                                                                                                                            2;
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      M.; Skelton,
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A; Experimental
                                                                                                                                                                     A;Title: Genome sequence of A;Reference number: A85480; A;Accession: E85985 A;Status: preliminary
                                                                                                                                        A; Molecule type: DNA
A; Residues: 1-309 <STO>
                                                                                                                                                                                                                                         iller, L.; Grotbeck, E.J.
Nature 409, 529-533, 2001
                                                                                                                                                                                                                                                                     hypothetical protein yhcc [imported] - Escherichia coli (strain O157:H7, su C;Species: Escherichia coli (coli (strain O157:H7, su C;Date: 16-Feb-2001 #sequence_revision 16-Feb-2001 #text_change 09-Jul-2004 procession: E85985
       Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                      RESULT 10
                                                                                           ;Cross-references: UNIPROT:P45476; GB:AE005174;
;Experimental source: strain 0157:H7, substrain
                                                                Superfamily:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A;Gene: yhcc
C;Superfamil
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Cybpecies: Escherichia coli
C;bpecies: Escherichia coli
C;bpecies: Escherichia coli
C;Date: 10-Sep-1999 #sequence_revision 10-Sep-1999 #text_change 09-Jul-2004
C;Accession: B65112
R;Blattner, F.R.; Plunkett III, G.; Bloch, C.A.; Perna, N.T.; Burland, V.; Rile
A.; Rose, D.J.; Mau, B.; Shao, Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A;Status: preliminary; nucleic acid sequence not shown; translation not A;Molecule type: DNA A;Residues; 1-309 <BLAT>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Science 277, 1453-1462, 19484, 1.
A;Title: The complete genome sequence of Escherichia coli K-12.
A;Reference number: A64720; MUID:97428617; PMID:9278503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local
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Experimental source: strain K-12,
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C;Superfamily: Methanococcus jannaschii conserved hypothetical protein MJ0486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A;Title: Complete genome sequence of a multiple drug resistant A;Reference number: AB0502; MUID:21534947; PMID:11677608 A;Reference number: AB0506; MUID:21534947; PMID:11677608 A;Statue: preliminary A;Statue: preliminary A;Residues; DEPARA A;Residues; 1-309 <PARA A;Residues; 1-309 <PARA A;Cross-references: GB:AL513382; PIDN:CAD07846.1; PID:g16504394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                          169 TTQLARQRGLK 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 TTRLTRKRGLK 11
                             Methanococcus jannaschii conserved hypothetical protein MJ0486
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
8; Conserv
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8; Conserv
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     75.9%;
72.7%;
                                                                                                                                                                                    of enterohemorrhagic Escherichia coli O157:H7
80; MUID:21074935; PMID:11206551
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               75.9%; Score 41; DB 72.7%; Pred. No. 2.8; tive 2; Mismatches
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72.7%;
     Score
Pred.
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41;
No.
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DB 2;
2.8;
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2.8;
                                                                                               NID:g12517832;
EDL933
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                                                                                                                                                                                                                                       Glasner,
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                                                                                          PIDN:AAG58345.1; GSPDB:G
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Potamousis,
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    Mayher Apodaca,

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A;Cross-references: UNIPROT:P24686; GB:M59705; GB:J05607; NID:g168026; PIDN:AAA51478.1; A;Note: in addition to three predicted transmembrane domains, there are several potential asein kinase, and one sequence that resembles a nuclear localization signal C;Comment: This protein is part of a regulatory pathway that includes the nimA protein of C;Comment: This protein is part of a regulatory pathway that includes the nimA protein of the mitosis and prevent them from leaving mitosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DNA Res. 8, 11-22, 2001
A;Title: Complete genome sequence of enterohemorrhagic Escherichia coli 0157:H7
A;Reference number: A99629; MUID:21156231; PMID:11258796
A;Accession: B91140
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B91140
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J. Biol. Chem. 265, 16132-16137, 1990
A;Title: A negative regulator of mitosis in Aspergillus is a putative membrane-spanning
A;Reference number: A37879; MUID:90375468; PMID:1697851
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A;Cross-references: UNIPROT:P45476; GB:BA000007; A;Experimental source: strain O157:H7, substrain
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                                                                                                                                                                                                                                                                                                                                                                                                                                       A;Molecule type: mRNA
A;Residues: 1-2073 <ENG>
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                                                                                                                                                                                                ;1746-1764/Domain: transmembrane #status predicted <TM3>
                                                                                                                                                                                                                                                         ;Keywords:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Species: Emericella nidulans, Aspergillus nidulans; Dec. 1991 #text_change 09-Jul-2004; Date: 31-Dec. 1991 #sequence_revision 31-Dec. 1991 #text_change 09-Jul-2004
                                                                                                                                                                                                                                                                            Superfamily: bimE protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Accession: A37879
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;Date: 18-Jul-2001 #sequence_revision 18-Jul-2001 #text_change 09-Jul-2004
;Accession: B91140
                                                                                                                                          Query Match
Best Local
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Best Local
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                                                                                                                                                                                                                  Keywords: cell cycle control; micosis; transmembrane protein
1623-1643/Domain: transmembrane #status predicted <TMl>
1685-1703/Domain: transmembrane #status predicted <TM2>
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                                           831
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8; Conserv
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                                                                              TTRLT-RKRGL 10
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/asunaga, T.; Kuhara, S.; Shiba, T.; Hattori,
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                                                                                                                     Conservative
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Pred. No. 2.8;
2; Mismatches
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                                                                                                                                      Score 38.5;
Pred. No. 4
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RIMD 0509952
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                                                                                                                 1;
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RESULT 13

588

TSSLMRKRGLK

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apolipoprotein B - pig (fragments)

C;Species: Sus scrofa domestica (domestic pig)
C;Date: 31-Mar-1992 #sequence revision 31-Mar-1992 #text_
C;Accession: JT0382; 146567; I46568
R;Maeda, N.; Ebert, D.L.; Doers, T.M.; Newman, M.; Hasler
Gene 70, 213-229, 1988
A;Title: Molecular genetics of the apolipoprotein B gene
A;Reference number: JT0382; MUID:89108006; PMID:2905687
A;Accession: JT0382
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JT0382
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gene 69, 213-229, 1988
A;Title: Molecular genetics
A;Reference number: 146567
A;Accession: 146567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A;Cross-references: UNIPROT:Q29020; UNIPROT:Q29433 R;Maeda, N.; Ebert, D.L.; Doers, T.M.; Newman, M.;
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                                                                                                                                                               A;Introns: 39/3; 88/3; 159/2; 238/3; 1133/1; 1171/2; 1232/3
A;Note: the list of introns may be incomplete
                                                                                                                                                                                                        C;Genetics:
A;Gene: apoB
                                                                                                                                                                                                                                                 A;Cross-references: GB:M22647; NID:g164367; PIDN:AAA30997.1; PID:g164370 C;Comment: Apolipoprotein B is the predominant protein component of the low-density
                                                                                                                                                                                                                                                                                           A; Molecule type: DNA
A; Residues: 239-1778 <MA3>
                                                                                                                                                                                                                                                                                                                                  A;Status: preliminary; translated from GB/EMBL/DDBJ
                                                                                                                                                                                                                                                                                                                                                      A;Molecule type: DNA
A;Residues: 1-8,'S',10-238 <MA2>
A;Cross-references: GB:M22646; NID:g164366; PIDN:AAA30996.1;
A;Accession: I46568
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A; Residues: 1-1778 < MAE>
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C;Keywords: calcium;
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A;Cross-references: UNIPROT:Q91480;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A; Molecule type: mRNA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        apolipoprotein B - Atlantic salmon (fragment)
C;Species: Salmo salar (Atlantic salmon)
C;Date: 04-Dec-1997 #sequence_revision 12-Dec-1997
C;Accession: S65460; I51362
                                           Matches
                                                               Query Match
Best Local
                                                                                                                                             Superfamily: apolipoprotein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Superfamily: apolipoprotein B
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8; Conservat
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                                           Conservative
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72.7%;
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                                         Score 38; DB
Pred. No. 51;
1; Mismatches
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apolloprotein B - pig (fragment)
C;Species: Sus scrofa domestica (domestic pig)
C;Species: Sus scrofa domestica (domestic pig)
C;Species: 146569
C;Accession: 146569
A;Title: Nucleotide sequence encoding the carboxyl-terminal half of apolipoprotein B from A;Accession: 146569
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Residues: 1-2629 <PUR>A;Cross-references: UNIPROT:Q29021; GB:L11235; NID:g164371; PIDN:AAA74655.1; PID:g951375
A;Gene: APOB
A;Introns: 1984/1; 2022/2; 2083/3
C;Superfamily: apolipoprotein B
Search completed: January 12, 2005, 13:31:57 Job time : 21.2258 secs
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                                                                                                                                                                          Query Match 70.4%; Score 38; DB 2; Length 2629; Best Local Similarity 72.7%; Pred. No. 72; Matches 8; Conservative 1; Mismatches 2; Indels
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1438 TSSLMRKRGLK 1448
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Compugen Ltd.
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| | Q7yr07 lemur catta | Q7yqr0 cynocephalu | Q7yqq7 tapirus bai | Q7yqn6 bradypus tr | | Q7yqn5 megaderma l | Q7yqr3 phocoenoide | _ | Q7yqq8 crocidura f | | Q7yqq9 sorex monti | Q7yr12 talpa europ | Q7yqp7 ochotona pr | Q7yrll tarsius syr | |

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01-QCT-2003 (TrEMBLrel. 25,
01-QCT-2003 (TrEMBLrel. 25,
MEDLINE=92075708; PubMed=1742325; Pape M.E., Castle C.K., Murray R.W., Marotti K.R., Melchior G.W.;
                                                                                                    Apolipoprotein B (Fragment).
Macaca fascicularis (Crab eating macaque) (Cynomolgus monkey)
Macaca fascicularis (Crob eating macaque) (Cynomolgus monkey)
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleost;
Mammalia; Eutheria; Primates; Catarrhini; Cercopithecidae;
Cercopithecinae; Macaca.
NCBI_TaxID=9541;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE=22761261; PubMed=12878460; Amrine=Madsen H., Koepfli K.-P., Wayne R.K. "A new phylogenetic marker, altipoprotein evidence for eutherian relationships."; Mol. Phylogenet. Evol. 28:225-240(2003). EMBL; AF548396; AAP97352.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Mammalia; Eutheria; Primates; Platyrrhini; Cebidae;
NCBI_TaxID=57176;
                                                        SEQUENCE FROM N.A.
TISSUE=Liver;
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Name=apoB-100;
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Homo sapiens (Human).
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MEDLINE=87191999; PubMed=2883086;
Carlsson P., Darnfors C., Olofsson S.O.
"Analysis of the human apolipoprotein
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Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
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G0:0005576; C:extracellular; NAS.
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G0:0006869; P:lipid transport; NAS.
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                                  Levy-Wilson B., Powell L.M., Pease R.J., Eddy R., Nakai Priestley L.M., Robertson E., Rall L.B., Betsholtz C., S "Human apolipoprotein B: structure of carboxyl-terminal (Science 230:37-43(1985).
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Bjursell G.,
"Molecular cloning of human apolipoprotein
Nucleic Acids Res. 13:8813-8826(1985).
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MEDLINE-88270450; PubMed=3:
Deeb S.S. Motulsky A.G.,
"A partial CDNA clone for
Proc. Natl. Acad. Sci. U.S
                                                                                                                                                       MEDLINE=85300528;
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Mehrabian M., Schumaker V.N., Fareed G.C., West R., Johnson D.F.,
Kirchgessner T.G., Lin H.-C., Wang X., Ma Y., Mendiaz E., Lusis A.J.,
"Human apolipoprotein B: identification of cDNA clones and
Nucleic Acids T. C. MRNA.";
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"The complete sequence and structural B-100: relationship between apoB-100 & EMBO J. 5:3495-3507(1986).
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MEDLINE-87161758; PubMed=3030729;
Cladaras C., Hadzopoulou-Cladaras
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"Human liver apolipoprotein B-100 cDNA: complete
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MEDLINE=88003974; PubMed=3652907;

Ludwig E.H., Blackhart B.D., Pierotti V.R., Caiati L., For Knott T., Scott J., Mahley R.W., Levy-Wilson B., McCarthy "DNA sequence of the human apolipoprotein B gene.";

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MEDLINE=87016385; PubMed=3763409;

KNOCT T.C., Wallis S.C., Powell L.M., Pease R.J., Lusis A.J.,

Blackhart B., McCarthy B.J., Mahley R.W., Levy-Wilson B., Scott J.;

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NCBI_TaxID=9606;
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., Grant S.M., Higuchi K., Hospattankar A.V.,
Brewer H.B. Jr.;
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Motulsky A.G., Albers J.J.;
cDNA clone for human apolipoprotein B.,
Acad. Sci. U.S.A. 82:4983-4986(1985).
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PALMITOYLATION OF CYS-1112.

MEDLINE=20143590; PubMed=10679026;
Zhao Y., McCabe J.B., Vance J., Berthiaume L.G.;
"Palmitoylation of apolipoprotein B is required intracellular sorting and transport of cholester
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Knott T.C., Pease R.J., Powell L.M., Wallis
Innerarity T.L., Blackhart B., Taylor W.R.,
Johnson D., Fuller M., Lusis A.J., McCarthy
Levy-Wilson B., Scott J.;
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                                                            MEDLINE=89098975; E
Soria L.F., Ludwig
                                                                                                                Navajas M., Laurent A.-M., Moreel J.-F., Ragab A., Cunny G., Cambien F., Roizes G.; "Detection by denaturing gradient gel electrophore polymorphism in the apolipoprotein B gene."; Hum. Genet. 86:91-93(1990).
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MEDLINE=91071750; PubMed=1979313;
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g E.H., Clarke H.R.
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PubMed=3461454;
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                                                              Grundy
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                                                                                                                                                                                                                                                                                                                                                                                                                                       internal
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Rieder M.J., Ahearn M.O., Nickerson D.A Submitted (JU)
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Hum. Mutat.
                                                                                                                                                                                                                                                                                                                                                 01-OCT-2003 (TrEMBLrel. 25,
01-OCT-2003 (TrEMBLrel. 25,
01-MAR-2004 (TrEMBLrel. 26,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           "Screening for mutations of the apolipoprotein hypocholesterolemia.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Rabes J.P., Varret M., Saint-Jore B., Erlich D., Krempf M., Giraudet P., Junien C., Solieau C.; "Familial ligand-defective apolipoprotein B-100: detection of the ARG3500-->GLN and ARG3531-->CYS
                                                                                                                                                                                                     Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                             Apolipoprotein B Name=APOB;
                                                                                                                                                                                                                                                                                                                                                                                                          Q7Z600;
01-OCT-2003
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Arveiler D., Marques-Vidal P., Luc
"Detection of new variants in the
PCR-SSCP.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE=95190020; PubMed=7883971; Publinger C.R., Hennessy L.K., Chatterton J.E., Liu W., Love J. Pullinger C.R., Frost P.H., Malloy M.J., Schumaker V.N., Kane J.P. Mendel C.M., Frost P.H., Malloy M.J., Schumaker V.N., Kane J.P. "Familial ligand-defective apolipoprotein B. Identification of mutation that decreases LDL receptor binding affinity."; J. Clin. Invest. 95:1225-1234(1995).
                                                                                                                SEQUENCE
                                                                                                                                                                                                                                                               Homo sapiens (Human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AND ILE-3921.
MEDLINE=98141125;
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Huang L.-S., Gavish D., Breslow J.L.;
"Sequence polymorphism in the human a
Nucleic Acids Res. 18:5922-5922(1990)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDLINE=97044521;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FUNCTION: Apolipoprotein B is a major protein constituent of chylomicrons (apo B-48), LDL (apo B-100) and VLDL (apo B-100). A B-100 functions as a recognition signal for the callular binding and internalization of LDL particles by the apoB/E receptor.
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97403938; PubMed=9259199;
                                                                                                                   FROM N.A.
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      (JUN-2003)
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                                                            Kuldanek
                                                         Carrington
Kuldanek S.
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n K.S., Hoel V.,
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                                                                                                                                                                                                        Chordata;
Primates;
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      EMBL/GenBank/DDBJ databases
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Pred. No. 0.4
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Catarrhini; Hominidae;
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Matches 11
SEQUENCE FROM N.A.
SEQUENCE FROM N.A.
MEDLINE=22761261; PubMed=12878460;
Amrine-Madsen H., Koepfli K.-P., Wayne R.K., "
"A new phylogenetic marker, apolipoprotein B,
"Vidence for eutherian relationships.";
                                                                                                                                                   01-OCT-2003 (TrEMBLrel. 25, Created)
01-OCT-2003 (TrEMBLrel. 25, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
Apolipoprotein B (Fragment)
Diceros bicornis (Black rhinoceros)
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Mammalia, Eutheria; Perissodactyla; Rhinocerotidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EMBL; AY324608; AAF72970.1; -. GO; GO:0005319; F:lipid transporter acti-GO; GO:0006899; F:lipid transport; IEA.
InterPro; IPR009454; DUF1081.
InterPro; IPR001747; Lipid transprt_N.
Pfam; PF06448; DUF1081; 1.
Pfam; PF01347; Vitellogenin_N; 1.
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MEDLINE=22761261; PubMed=12878460;

Amrine-Madsen H., Koepfli K.-P., Wayne R.K., Septiment of the service 
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01-OCT-2003 (TrEMBIrel. 25, Last sequence update)
01-OCT-2003 (TrEMBIrel. 25, Last annotation update)
01-OCT-2003 (TrEMBIREL 25, Last annotation update)
Apolipoprotein B (Fragment).
Glaucomys volans (Southern flying squirrel).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Sciuridae; Petauristinae;
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01-OCT-2003 (TrEMBLrel.
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| TSRLTRKRGLK 273
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421
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90.9%;
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Pred. No. 0.22
1; Mismatches
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Pred. No. 0.4
0; Mismatches
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0.22;
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                             Springer M.S., provides com
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Diceros.
                        compelling
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Best Local
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Q7YQM7;
Q7YQM7;
01-CCT-2003 (TrEMBLrel. 25
01-CCT-2003 (TrEMBLrel. 25
01-CCT-2003 (TrEMBLrel. 25
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Best Local (
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SEQUENCE FROM N.A.

MEDILINE=22761261; PubMed=12878460;

Amrine-Madsen H., Koepfili K.-P., Wayne R.K., Wayne R.K., Wayne R.K., Wayne Phylogenetic marker, apolipoprotein B, evidence for eutherian relationships.";

Mol. Phylogenet. Evol. 28:225-240(2003).
                                                                                     Pteropus hypomelanus (Small flying fox).
Eukaryota; Metazoa; Chordata; Craniata; Vertebra
Mammalia; Eutheria; Chiroptera; Megachiroptera;
                                                                                                                        Apolipoprotein B 100 (Fragment).
Name=apoB-100;
                                                                                                                                                                                                                                                                                                                Lipoprotein.
NON_TER
NON_TER
4;
SEQUENCE 43:
                                                                       NCBI_TaxID=9405;
                                                                                 Pteropodinae; Pteropus.
                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.

MEDIJNB=22761261; PubMed=12878460;

Amrine-Madsen H., Koepfli K.-P., Wayne R.K., (
"A new phylogenetic marker, apolipoprotein B,
evidence for eutherian relationships.";

Mol. Phylogenet. Evol. 28:225-240(2003).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Q7YQM8
Q7YQM8;
01-OCT-2003
01-OCT-2003
                                                                                                                                                                                                                                                                                                                                                                                                                              Nyctimene albiventer (Common tube-nosed fruit bat).
Eukaryota; Metazoa; Chordata; Craniata; Vertebzata; Euteleostomi;
Mammalia; Eutheria; Chiroptera; Megachiroptera; Pteropodidae;
Pteropodinae; Nyctimene.
NCBI_TaxID=48988;
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NON_TER
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SEQUENCE 43
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EMBL; AY243375; AAP50763.1;
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25, Last sequence update)
25, Last annotation updat
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1; Mismatches
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Pred. No.
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Last sequence update)
Last annotation update)
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Pred. No.
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                                                                                                                                                                                                                                                                                         Length 436;
                                                                                      Pteropodidae;
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Best Local S
Matches 10
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Best Local (
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Q7YR08;
01-OCT-2003
                                                                                                                                                                                                                                                           Apolipoprotein B (Fragment).
Chaetophractus villosus (South American armadillo).
Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Edentata; Dasypodidae; Chaetophractus.
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Q7YR04;
                                                      evidence for eutherian relation Phylogenet Evol. 28:27
EMBL; AY243378; AAP50766.1;
                                                                               MEDLINE=22761261; PubMed=12878460;
Amrine-Madsen H., Koepffi K.-P., Wayne R.K.
"A new phylogenetic marker, apolipoprotein
evidence for eutherian relationships.";
Mol. Phylogenet. Evol. 28:225-240(2003).
                                                                                                                                                                                                                                                                                                                                             01-OCT-2003 (TrEMBLrel. 25, Created)
01-OCT-2003 (TrEMBLrel. 25, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Apolipoprotein B (Fragment).
Rousettus amplexicaudatus (Common rousette).
Bukaryota, Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Chiroptera; Megachiroptera; Pteropodidae;
Pteropodinae; Rousettus.
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                      Lipoprotein.
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MEDLINE=22761261; PubMed=12878460;
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1. Phylogenet. Evol. 28:225-240(2003).
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Pred. No. 0.23
1; Mismatches
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RESULT 13
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SEQUENCE 44
                                                                                                                      MEDLINE=22761261; PubMed=12878460; Mayne R.K. Amrine-Madsen H., Koepfli K.-P., Wayne R.K. "A new phylogenetic marker, apolipoprotein evidence for eutherian relationships."; Mol. Phylogenet. Evol. 28:225-240(2003). EMBL; AY243369; AAP50757.1; ...
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01-OCT-2003 (TrEMBLrel. 25,
01-OCT-2003 (TrEMBLrel. 25,
01-MAR-2004 (TrEMBLrel. 26,
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01-OCT-2003
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Mammalia; Eutheria; Rodentia; Hystricognathi; Hydrochaeridae;
                                                                                                                                                                                                                                                                                                                                                                                 Apolipoprotein B (Fragment).
Hydrochoerus hydrochaeris (Capybara)
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Amrine-Madsen H., Koepfli K.-P., Wayne R.K.
Marine-Madsen H., Koepfli K.-P., Wayne R.K.
"A new phylogenetic marker, apolipoprotein
evidence for eutherian relationships.";
Mol. Phylogenet. Evol. 28:225-240(2003).
EMBL, AF548417; AAP97373.1; -.
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01-OCT-2003 (TERMBLrel. 25, Last sequence update)
01-OCT-2003 (TERMBLrel. 25, Last annotation update)
Apolipoprotein B 100 (Fragment).
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Mammalia; Eutheria;
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PS00146; BETA_LACTAMASE_A; UNKNOWN
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  CBBA2DD53D7A18D2 CRC64;
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Q60536;
Q1-NOV-1996 (TrEMBLrel. 01, Created)
Q1-NOV-1996 (TrEMBLrel. 01, Last sequence update)
Q1-OCT-2003 (TrEMBLrel. 25, Last annotation update)
Hamster apolipoprotein (apoB) (Fragment).
Mesocricetus auratus (Golden hamster).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Cricetinae;
                                          SEQUENCE FROM N.A.

MEDILINE=90236327; PubMed=2332175;

Smith T.J., Hautamaa D., Maeda N.;

"Sequence of the putative low-density lipoprotein receptor-binding regions of apolipoprotein B in mouse and hamster.";

Gene 87:309-310(1990).

EMBL; M35187; AAA37059.1; -.

PIR; C60950; C60950.

PIR; JH0102.
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Q1-OCT-2003 (TrEMBLrel. 25, Last sequence update)
Q1-OCT-2003 (TrEMBLrel. 25, Last sequence update)
Q1-OCT-2003 (TrEMBLrel. 25, Last annotation update)
Q1-OCT-2003 (TrEMBLrel. 25, Last annotation update)
Apolipoprotein B (Fragment)
Brethizon dorsatum (North American porcupine)
Erethizon dorsatum (North American porcupine)
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Hystricognathi; Erethizontidae;
     SEQUENCE
                                                                                                                                                                  NCBI_TaxID=10036; [1]
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EMBL; AY243368; AAP50756.1; ...
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| 100.0 | 100.0 | | 100.0 | 100.0 | 100.0 | | • | 100.0 | • | 100.0 | • | 100.0 | • | 100.0 | • | • | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | Match | Query |
| 3923 | 2463 | 377 | 377 | 343 | 343 | 51 | 37 | 36 | 34 | 23 | 22 | 22 | 20 | 15 | 15 | 15 | 13 | 12 | 11 | 11 | 11 | 11 | 11 | 11 | Length | |
| N | œ | N | N | 4 | 4 | N | N | N | v | 6 | N | N | σ | N | N | N | N | N | 7 | σ | v | N | N | N | BB | |
| AAY31237 | ADJ57400 | AAR34031 | AAR72704 | ABG52504 | ABB37687 | AAW96845 | AAW64587 | AAW96876 | AAE14541 | ABR57177 | AAW57209 | AAW57208 | ABJ37575 | AAW96892 | AAW41261 | AAW22911 | AAW57207 | AAW41260 | ADF56451 | ABU07938 | AAE21732 | AAW87717 | AAW57206 | £ 5 | ij | |
| Aay31237 Human Apo | Adj57400 Human apo | Aar34031 Sequence | 4 | Abg52504 Human liv | 7 Peptide | Aaw96845 Nucleic a | Aaw64587 Human apo | Aaw96876 Nucleic a | Aael4541 Human apo | n | W | Apo B 10 | Abj37575 Heparin b | Aaw96892 ApoB-100 | Aaw41261 Apolipopr | WO'L | 7 | _ | Adf56451 Human apo | Abu07938 Apoprotei | Aae21732 BSMR effe | Aaw87717 Analogue | Aaw57206 Apo B 100 | Аро в ъ | ription | |

| 45 | 44 | 43 | 42 | 41 | 40 | 39 | 38. | 37 | 36 | 35 | 34 | <u>ω</u> | 32 | 31 | 30 | 29 | 28 | 27 | 26 |
|----------|----------|----------|----------|----------|----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 39 | 39 | 39 | 39 | 39 | 40 | 40 | 44 | 44 | 44 | 44 | 44 | 44 | 44 | 44 | 44 | 44 | 44 | 44 | 44 |
| 88.6 | 88.6 | 88.6 | 88.6 | 88.6 | 90.9 | 90.9 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | T00.0 |
| 10 | 10 | 10 | 10 | 10 | 10 | .10 | 4590 | 4563 | 4563 | 4563 | 4563 | 4563 | 4563 | 4563 | 4563 | 4561 | 4560 | 4536 | 4536 |
| N | N | N | N | N | N | N | 4. | œ | œ | œ | œ | 7 | σ | σ | ÇI | 7 | σı | N | 2 |
| AAY30688 | AAY30686 | AAY30693 | AAY30692 | AAY30690 | AAY30687 | AAY30682 | AAU33184 | ADO33447 | ADO33445 | ADH18870 | ADH18871 | ADF43408 | ABU79140 | ABR40253 | AA015893 | ADD48677 | AAU98981 | AAW96826 | AAW41262 |
| Aay30688 | Aay30686 | Aay30693 | Aay30692 | Aay30690 | Aay30687 | Aay30682 | Aau33184 | Ado33447 | Ado33445 | Adh18870 | Adh18871 | Adf43408 | Abu79140 | Abr40253 | Aao15893 | Add48677 | Aau98981 | Aaw96826 | Aaw41262 |
| Apo-B100 | Novel hum | Human apo | Human apo | Human apc | Human apc | Apolipopr | Apolipopr | Human ali | Human apo | Human Pro | Human apo | Amino aci | Apolipopr |

ALIGNMENTS

RESULT 1
AAW57205
ID AAW5
XX AAW5
AC AAW5
XX AAPO
XX APO
X Apo B; binding site; receptor; cancer; drug delivery; anticancer; growth supplement; non-natural lipid particle; low density lipopr LDL; receptor component; apo B100 receptor site. Halbert GW, 27-SEP-1996; Synthetic. 03-AUG-1998 (first entry) AAW57205 standard; peptide; 25-SEP-1997; 02-APR-1998. WO9813385-A2. Apo B binding site peptide 2. AAW57205; (UYST) UNIV STRATHCLYDE Owens MD, 96GB-00020153 97WO-GB002610. Baillie 11 ₿ <u>ი</u> density lipoprotein;

The present sequence represents a specifically claimed Apo B binding site peptide which can be used as a component of a non-naturally occurring, receptor-competent low density lipoprotein (LDL) particle of the present invention. The LDL particle comprises at least 1 peptide component that has at least 1 binding site for an apo B protein receptor and at least 1 lipophilic substituent. Also described in the invention are peptides containing an apo B binding sequence with at least 70% identity with sequences: KAEYKKNKHRH (1) or TTRLTRKRGLK (2), or their dimers. Non-naturally occurring, receptor-competent LDL particles are useful as: (i) drug-targeting vectors for delivering anticancer drugs to cancer cells that express an apo B protein receptor, and (ii) additives for cell culture media especially as growth supplements. Non-naturally occurring, Claim 12; Page 52; 73pp; English. Non-natural lipid particle comprising peptide binding to apo B protein receptor - useful as, e.g. vector for delivering drugs to cancer cells that express this receptor.

WPI; 1998-230637/20.

0,

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RESULT 2
AAW57206
ID AAW57206
AC AAW5
AC AC AAW5
AC AA
The present sequence represents a specifically claimed Apo B 100 binding CC Site peptide analogue which can be used as a component of a non-
CC naturally occurring, receptor-competent low density lipoprotein (LDL)
CC particle of the present invention. The LDL particle comprises at least 1
CC peptide component that has at least 1 binding site for an apo B protein
CC invention are peptides containing an apo B binding sequence with at least
CC dimers. Non-naturally occurring, receptor-competent LDL particles are
CC dimers. Non-naturally occurring, receptor-competent LDL particles are
CC cancer cells that express an apo B protein receptor and (ii) additives
CC coccurring, receptor-competent LDL particles are
CC coccurring, receptor-competent LDL particles are
CC coccurring, receptor-competent LDL particles are
CC apo B sequence, which is large and tends to aggregate, to provide binding
CC affinity to an apo B protein receptor and (ii) additives
CC affinity to an apo B protein receptor and the complete
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         В
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Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 13; Fig 7; 73pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Non-natural lipid particle comprising peptide binding to apo B protein receptor - useful as, e.g. vector for delivering drugs to cancer cells that express this receptor.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       27-SEP-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      25-SEP-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (UYST)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Apo B; binding site; receptor; cancer; drug delivery; anticancer; growth supplement; non-natural lipid particle; low density lipoprotein; LDL; receptor component; apo B100 receptor site.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Apo B 100 binding site peptide analogue peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  03-AUG-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAW57206;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAW57206 standard; peptide; 11 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 11 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                receptor-competent LDL particles do not require the sequence, which is large and tends to aggregate, to affinity to an apo B protein receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity 100.0%;
Local Similarity 100.0%;
les 9; Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   UNIV STRATHCLYDE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 w
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RLTRKRGLK 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Owens MD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note= "attached to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             note= "attached to retinoic acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Baillie G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0,
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Pred. No. 0.089;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              cholesterol"
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provide binding
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CC The present sequence is an analogue of apoprotein B 100. The peptide, CC which has Ly85 conjugated with malondialehyde (MDA), inhibits uptake of CC apoprotein B-based low density lipoprotein (LDL) (or partly modified CC antibodies are useful in treatment and diagnosis, especially for CC atherosclerosis. Atherosclerosis is characterised by thickening and CC streaks containing foam cells and, secondly, the formation of fatty CC plaques within the artery. Foam cells are formed by endocytosis of coxidised LDL by macrophages via a scavenger receptor, which causes cells core receptors. The peptides of the invention are oxidised and present CC receptors. The peptides of the invention are oxidised and present CC receptor, so preventing LDL uptake by the high affinity LDL cc receptor, so preventing LDL uptake by the high affinity LDL receptor, and complete cell formation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 3
AAW87717
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Sequence 11 AA;
                                                                                                                                                                                                                         Oxidised fragments of apoprotein B-based low density lipoprotein, which inhibits LDL uptake by high affinity LDL receptor, useful e.treatment and diagnosis of atherosclerosis.
                                                                                                                                                                                                            Claim 2; Page 2; 23pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
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Best Local ;
                                                                                                                                                                                                                                                                                         WPI; 1999-045137/04.
                                                                                                                                                                                                                                                                                                                                       (UYLE-) UNIV LEICESTER.
                                                                                                                                                                                                                                                                                                                                                                  20-MAR-1997;
                                                                                                                                                                                                                                                                                                                    Lunec J,
                                                                                                                                                                                                                                                                                                                                                                                        20-MAR-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Analogue; apoprotein B 100; malondialdehyde; MDA; atherosclerosis; apoprotein B-based low density lipoprotein; LDL; foam cell; high affinity LDL receptor; cholesterol; epitope.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Analogue of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAW87717 standard; peptide;
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                                                                                                                                                                                                                                                                                                               Bevan R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
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                                                                                                                                                                                                                                                                                                                                                            97GB-00005831.
                                                                                                                                                                                                                                                                                                                                                                                    98WO-GB000677.
                                                                                                                                                                                                                                                                                                                                                                                                                                                /note= "conjugated to malondialdehyde (MDA) "
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100.0%; P
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Pred. No. 0.00
0; Mismatches
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0;
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                                                                                                                                                                                                                                                   LDL
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Query Match 100.0%; 8
Best Local Similarity 100.0%; 1
Matches 9; Conservative 0;

Score 44; DB 2; Pred. No. 0.089; Mismatches

Length 11;

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Best Local :
                                                                                                                                                                   The invention relates to bone strength and mineralisation regulatory protein (BSMR) and its corresponding nucleic acid sequence. BSMR DNA is useful for the diagnosis or therapy of osteoporosis and for regulating (increasing) bone strength and mineralisation in a human subject by activating bone density regulating transmembrane receptor (BSMR protein). An expression vector comprising a promoter that is operably linked to BSMR DNA is useful for modulating bone density and for enhancing bone strength and mineralisation in a mammal cell. Composition comprising a BSMR effector is useful for treating osteoporosis and is useful particularly as a coating for prosthetic devices and surgical implants. BSMR is useful for screening lead pharmaceutical agents as BSMR effectors, which may be used to treat a range of eye disorders such as diabetic retinopathy, hypertensive retinopathy and retinopathy of prematurity, in which mormal vascular growth and integrity of ocular
                                                                                                                                                       prematurity, in which vessels is disrupted.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Bone strength and mineralisation regulatory protein; BSMR; bone st
mineralisation; ophthalmological; antidiabetic;
bone density regulating transmembrane receptor; prosthetic device;
surgical implant; diabetic retinopathy; hypertensive retinopathy;
therapy; osteoporosis; prematurity; ocular vessel; eye disorder;
                                                                                                                           Sequence 11
                                                                                                                                                                                                                                                                                                                                                                                                                                               Polynucleotide encoding bone strength and mineralization regulatory protein useful for diagnosis or therapy of osteoporosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18-AUG-2000; 2000US-0226119P.
22-SEP-2000; 2000US-0234337P.
13-JUL-2001; 2001US-0304851P.
                                                                                                                                                                                                                                                                                                                                                                                                                Claim 9; Page 78; 124pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Warman
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (AVET ) AVENTIS PHARMA SA. (HARD ) HARVARD COLLEGE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17-AUG-2001; 2001WO-US041788.
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                                                                              Similarity
                               RLTRKRGLK 9
                                                                                                                           ξ
                                                             Conservative
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                                                                            100.0%;
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                                                                                                                                                      The present sequence
                                                            0,
                                                                           Score 44; DB 5;
Pred. No. 0.089;
                                                            Mismatches
                                                                                                                                                         is BSMR effector
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                                                            0,
                                                                                      Length 11;
                                                            Indels
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ADF56451 ID ADF XX

ADF56451 standard; peptide; 11

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RESULT 6

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Similarity 9; Conser RLTRKRGLK 9

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Gaps

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The invention describes a molecule (I) inhibiting uptake by the high CC affinity low density lipoprotein (LDL) receptor of LDL or its partially CC modified form. (I) And an antibody (II) that binds (I) are useful in the CC manufacture of a medicament for inhibiting uptake by the high affinity CC LDL receptor of LDL or a partially modified form of it. (I) And (II) are CC useful in the diagnostic test for oxidised LDL, or antibody specific CC against oxidised LDL, which will cause uptake by the high affinity LDL CC or (II) with a sample; (b) detecting an antibody-antigen binding reaction CC; and (C) correlating the detection of the antibody-antigen binding reaction CC oxidised LDL, which will cause uptake by the high affinity LDL receptor CC of LDL or a partially modified form of the antibody-antigen binding CC reaction with the presence of oxidised LDL, or antibody specific against CC oxidised LDL, which will cause uptake by the high affinity LDL receptor CC of LDL or a partially modified form of it. (I) Is useful as an immunogen, CC e.g., for the production of antibodies, and particularly in the treatment CC and diagnosis of atherosclerosis. (I) And (II) are useful as reagents in CC diagnostic tests, and for preventing foam cell formation. This is the conhibit uptake of the high affinity low density lipoprotein (LDL) by the
 Query Match
Best Local S
Matches 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (LUNE/)
(BEVA/)
(GRIF/)
                                                                             Sequence 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New molecule useful for diagnosing oxidized low density lipoprotein (LDL), and for inhibiting the uptake of LDL by high affinity LDL receptor, or its partially modified form.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABU07938 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 1; Page 3; 8pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2003-328393/31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Lunec J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20-MAR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20-SEP-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US2002164679-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Apoprotein B 100;
LDL; LDL receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Apoprotein B 100,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             23-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABU07938;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             HUNEC J.
BEVAN R.
GRIFFITHS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                receptor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Bevan R,
100.0%; Score 44; DB 6; Length 11; llarity 100.0%; Pred. No. 0.089; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        98WO-GB000677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9908-00398902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Apo B; human. high affinity low density lipoprotein; immunogen; atherosclerosis; foam cell formation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       residues 3359-3369.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    peptide; 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Griffiths H;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        B
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RESULT 7
AAW41260
ID AAW4
XX AAW4
AC AAW4
XX AAW4
XX 19-M
XX 19-M
XX BP01
XX Anti
KW Apol
                                                                                                                                                                                                                                                              CC The invention relates to a molecule comprising one of three fully defined comparising one of three partially modified form. The molecule is useful for treatment or diagnosis of the comparising uptake by the high affinity LDLR or its partially comparising uptake by the high affinity LDLR or its partially modified comparist oxidised LDL or oxidised LDL respectively, which will compare uptake by the high affinity LDLR or its partially modified comparising the high affinity LDLR or its partially modified comparising and antibodies are for diagnosting and treating the form.

CC antherosclerosis. The present sequence represents a human apolipoprotein B
                                                                                                                                                                                                                             Query Match
Best Local S
Anti-coagulant; apolipoprotein B-100; apoB-100; metastatic spread; angiogenesis; cellular differentiation; apoptosis; KRAD-14;
                                                                                                                                                                                                                     Matches
                                                                Apolipoprotein
                                                                                     19-MAY-1998
                                                                                                                AAW41260 standard; peptide; 12 AA.
                                                                                                                                                                                                                                                                                                                                                                                                          New molecule, useful for treating and diagnosing atherosclerosis, comprises 11 amino acid sequence conjugated with malondialdehyde and inhibits low density lipoprotein receptor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (LUNE/) LUNEC J.
(BEVA/) BEVAN R.
(GRIF/) GRIFFITHS H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2003-697154/66.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Lunec J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20-SEP-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  05~FEB-2003; 2003US-00358594.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US2003157567-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    human; apolipoprotein B 100; malondialdehyde; MDA;
low density lipoprotein; high affinity LDL receptor;
high affinity LDLR uptake inhibitor; atherosclerosis;
                                                                                                                                                                                     1 RLTRKRGLK 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human apolipoprotein B 100 fragment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                12-FEB-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADF56451;
                                                                                                                                                                                                                   Similarity
9; Conserv
                                                                                                                                                                       RLTRKRGLK 9
                                                                             (first entry)
                                                                                                                                                                                                          ilarity 100.0%; Score 44; DB 7; Length 11; Conservative 0; Mismarthan
                                                        B-100 fragment.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Bevan R, Griffiths
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                9908-00398902,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                       English.
                                                                                                                                                                                                      Mismatches
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                                                                                                                                                                                             0; Indels
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                                                                                                                                                            RESULT 8
AAW57207
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                                                                                                                         AAW57207;
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This sequence is an example of the peptide of the invention. It has the CC formula (I), or their variants with one or more internal deletions, CC insertions or substitutions, while retaining anti-coagulant properties of CC apolipoprotein B-100 (apoB-100), Z1-KAQ-X1-KXKHRHS-X2-T-Z2 (I) X1 = S or Y, X2 = T or I; Z1 = the N terminus of the peptide, or 1-47 amino acids CC (aa), Z2 = the C terminus of the peptide, a terminal amide group or 1-77 cc an compositions containing the paptide, a terminal amide group or 1-77 cc metastatic spread. They are also used to inhibit thromboplastin-mediated CC during or after surgery or in cases of heart attack, stroke etc.) and to prevent argiogenesis, celular differentiation or apoptosis. KRAD-14, CC activation of the prothrombinase complex, and prevents activation of the surface of thromboplastin and of platelets by thrombin. CC smaller than apoB-100, they act more onlickly.
                                Key
Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local S
                                                                          Apo B; binding site; receptor; cancer; drug delivery; anticancer; growth supplement; non-natural lipid particle; low density lipoprotein; LDL; receptor component; apo B100 receptor site.
                                                                                                                                                       Apo B 100 binding site peptide analogue peptide B.
                                                                                                                                                                                                                    03-AUG-1998
                                                                                                                                                                                                                                                                     AAW57207 standard; peptide; 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure; Page 9; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Peptide fragments of apo:lipo:protein B-100 with anticoagulant activity used for treating or preventing coagulation, inhibiting angiogenesis,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1998-008798/01.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Bruckdorfer KR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (UNLO ) ROYAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              09-MAY-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Synthetic.
Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             09-MAY-1997;
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                                                                                                                                                                                                                                                                                                                                                                                   1 RLTRKRGLK 9
                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
9; Conserv
                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                     llarity 100.0%; Score 44; DB 2; I Conservative 0; Mismatches 0;
                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FREE HOSPITAL SCHOOL MED.
"attached to retinoic acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     96GB-00009702.
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RESULT 9
AAW22911
ID AAW2
XX AAW
AC AAW2
XX DT 02-C
XX LOW
XX LOW
XX LOW
XX W Peag
XX Synt
XX W09:
XX W09:
XX PN W09:
XX PP 09-C
XX AAW
AC AAS
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PA (AS
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Best Local s
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          naturally occurring, receptor-competent low density lipoprotein (LDL) particle of the present invention. The LDL particle comprises at least 1 peptide component that has at least 1 binding site for an apo B protein receptor and at least 1 lipophilic substituent. Also described in the invention are peptides containing an apo B binding sequence with at least 70% identity with sequences: KAEYKKNKHRH (1) or TRELTEXERGEK (2), or their dimers. Non-naturally occurring, receptor-competent LDL particles are useful as: (1) drug-targeting vectors for delivering anticancer drugs to cancer cells that express an apo B protein receptor, and (11) additives for cell culture media especially as growth supplements. Non-naturally occurring, receptor-competent LDL particles do not require the complete apo B sequence, which is large and tends to aggregate, to provide binding affiliate to approach the complete apone for a particle sequence.
                                                                                                                                                                      Synthetic
                                                                                                                                         WO9700889-A1
             (ASAH ) ASAHI
(ASAH ) ASAHI
                                                        21-JUN-1995;
                                                                                   21-JUN-1996;
                                                                                                                09-JAN-1997
                                                                                                                                                                                                                Low density;
                                                                                                                                                                                                                                            Low density
                                                                                                                                                                                                                                                                         02-OCT-1997
                                                                                                                                                                                                                                                                                                     AAW22911
                                                                                                                                                                                                                                                                                                                             AAW22911 standard; peptide; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 apo B sequence, which is larg
affinity to an apo B protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present sequence represents a specifically claimed Aposite peptide analogue which can be used as a component of a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 13; Fig 7; 73pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Non-natural lipid particle comprising peptide binding to apo B protein receptor - useful as, e.g. vector for delivering drugs to cancer cells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Halbert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           27-SEP-1996;
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9; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                      RLTRKRGLK 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                           lipoprotein binding peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                thie
                                                                                                                                                                                                                lipoprotein; LDL; binding; absorbent; removal; body fluid.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Owens MD,
                                                                                                                                                                                                                                                                       (first
              KASEI KOGYO KK
MEDICAL CO LTD
                                                       95JP-00176904
                                                                                   96WO-JP001734
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          96GB-00020153
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                                                                                                                                                                                                                                                                       entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 44; DB;
Pred. No. 0.1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 13;
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RESULT 10
ANAW41261
ID ANAW41261
XX ANAW41
XX ANAW4
XX ANAW
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Best Local S
Matches 9
This sequence is an example of the peptide of the invention. It has the formula (I), or their variants with one or more internal deletions, insertions or substitutions, while retaining anti-coagulant properties of apolipoprotein B-100 (apoB-100). Z1-KAQ-X1-KKNKHRHS-X2-T-Z2 (I) X1 = S of Y. X2 = T or I, Z1 = the N terminus of the peptide, or 1-47 amino acids (aa); Z2 = the C terminus of the peptide, a terminal amide group or 1-77 aa. Compositions containing the peptide are used for simultaneous, separate or sequential treatment of cancer, particularly to prevent
                                                                                                                                                                                                                                                                                                              Peptide fragments of apo:lipo:protein B-100 with anticoagulant activity used for treating or preventing coagulation, inhibiting angiogenesis, cell differentiation and apoptosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The present low density lipoprotein (LDL) binding peptide can be used an absorbent to remove LDL from body fluids, or as a LDL binding reage The peptide can be prepared easily and at low cost, and has excellent stability and preservability. It specifically binds LDL, and does not cause bradykinin production, white blood cell activation or blood
                                                                                                                                                                                                                                                            Disclosure; Page 22; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Synthetic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Anti-coagulant; apolipoprotein B-100; apoB-100; metastatic spread; thromboplastin-mediated process; cancer; inhibitor; blood coagulat anglogenesis; cellular differentiation; apoptosis; KRAD-14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 15 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 1998-008798/01.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           09-MAY-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   09-MAY-1997;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (UNLO ) ROYAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
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body fluids and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 1997-087320/08
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9; Conserv
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ilarity 100.0%;
Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FREE HOSPITAL SCHOOL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           96GB-00009702
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                complex.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ettelaie
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Z
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Pred. No. 0.12;
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                                                                                                                   or of
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CC AAW96878-97 represent nuclear localisation signal sequence derived from CC component of very-low density lipoproteins (VLDL), a major apoprotein (CC lipoprotein (VLDL), low density lipoproteins (VLDL), intermediate density component of very-low density lipoproteins (VLDL), intermediate density composition that composition of the lipoprotein (CC specification describes a composition representation of the invention of the invention of the composition is sed to delive and in that comprises LDL and in the CC vivo or in vito, for expressive nucleic acids to the composition of the invention. The CC cancers (particularly non-small cell lung carcinoma), diabetes, cystic cells, in thousand arteriosclerosis cell lung carcinoma), diabetes, cystic
                                                                                                                                                                   Claim 19; Fig 13D; 293pp; English.
                                                                                                                                                                                                                                                  WPI; 1999-070331/06.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 11
AAW96892
                                                                                                                                                                                                                                                                              Guevara JG,
                                                                                                                                                                                                                                                                                                                         13-JUN-1997;
14-MAY-1998;
                                                                                                                                                                                                                                                                                  (BAYU) BAYLOR COLLEGE MEDICINE.
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                                                                                                                                                                                                                                                                                                                                                         10-JUN-1998;
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Best Local Similarity
Matches 9; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               88888888888888
                                                                                                                                                                                                                                                                                                                                                                                              Human apolipoprotein B-100; apoB-100; very-low density lipoprotein; binding; in vivo transport; nucleic acid, binding union-small cell lung carcinoma, diabetes; arteriosclerosts. Fibrosis; VLDL; and lung carcinoma, diabetes; arteriosclerosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         ApoB-100 nuclear localisation signal sequence, residues 3353-3367.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            22-APR-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAW96892;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAW96892 standard; peptide; 15 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      metastatic spread. They are also used to inhibit thromboplastin-mediated during or after surgery or in cases of heart attack, cagulation (e.g. which is active as such as part of a 98-aa peptide, inhibit after surgery or in cases of heart attack, stroke etc.) and to factor for the prothrombinase complax; and protests. KRAD-14, It binds to the eurface of thromboplax; and prevents activation of smaller than apoB-100, they act more quickly in Since (I) are much
                                                                                                                                                                                                ion comprising nucleic acid bound delivering nucleic acid to cells
                                                                                                                                                                                                                                                                  Hoogeveen RC,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 RLTRKRGLK 9
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                                                                                                                                                                                                                                                                                                             97US-00874807.
98US-00079030.
                                                                                                                                                                                                                                                                                                                                           98WO-US011927.
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100.0%; Pred. No. 0.12;
0; Mismatches 0
                                                                                                                                                                                                                                                          Moore Jp;
                                                                                                                                                                        for gene therapy and antisense
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         RESULT 13
AAW57208
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Query Match
Best Local S
        03-AUG-1998
                                                                                                                 Matches
                         AAW57208;
                            AAW57208 standard; peptide;
                                                                                                                            The invention relates to a novel ligand for binding a target biomolecule, which comprises a peptide having at least one sulphated or sulphonated charged amino acids. The movel ligands can be used from reutral and positively than sequence represents a heparin binding peptide relating to the treatment of invantion and positively invantion.
                                                                                                                                                                                                   Use of a ligand comprising of at least one sulfated or sulfonated amino retinopathy and hypoxia.
                                                                                                                                                                                                                                                              WPI; 2003-300420/29.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 12
ABJ37575
ID ABJ35
                                                                                                                                                                                                                                                                                Hubbell JA,
                                                                                                                                                                                                                                                                                                              20-JUL-2001; 2001US-0306726P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g,
                                                                                                                                                                                                                                                                                                                             22-JUL-2002; 2002WO-US023419,
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                                                                                     1 RLTRKRGLK 9
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                                                                                                                                                                                                                                                                                                                                                                Cytostatic; antirheumatic; antiarthritic; antidiabetic; ophthalmological, rheumatoid arthritis; hypoxia; diabetic retinopathy; heparin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 100.0%; Score 44; DB 2;
Matches 9; Conservative 0; Mismatches 0
                                                                                                                                                                                                                                                                                                                                                                                                                  Heparin binding peptide sequence #28.
                                                                        RLTRKKGLK 16
                                                                                                             Similarity
9; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                        10-MAY-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ĀBJ37575 standard; peptide; 20
(first entry)
                                                                                                                                                                                                                                                                                            ) ETH ZUERICH.
                                                                                  ilarity 100.0%; Score 44; DB 6; Length 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                        Schoenmakers R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 RLTRKRGLK 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               7 RÍTRKRGÍK 15
                                                                                                                                                                                                                                                                  Maynard HD;
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RESULT 14
AAW57209
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present sequence represents a specifically claimed Apo B 100 binding site peptide analogue which can be used as a component of a nonnaturally occurring, receptor-competent low density lipoprotein (LDL) particle of the present invention. The LDL particle comprises at least 1 peptide component that has at least 1 binding site for an apo B protein receptor and at least 1 lipophilic substituent. Also described in the invention are peptides containing an apo B binding sequence with at least 70% identity with sequences: KABYKKNKKHRH (1) or TRETREREGIK (2), or their the containing and the containing analogue and the containing and the 
     Apo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                dimers. Non-naturally occurring, receptor-competent LDL particles are useful as: (1) drug-targeting vectors for delivering anticancer drugs to cancer cells that express an apo B protein and (ii) additives for cell culture media especially as growth supplements. Non-naturally occurring, receptor-competent LDL particles do not require the complete apo B sequence, which is large and tends to aggregate, to provide binding
                                              Apo B 100 binding site peptide analogue peptide D.
                                                                                                     03-AUG-1998
                                                                                                                                                       AAW57209
                                                                                                                                                                                                 AAW57209 standard; peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              apo B sequence, which is raise which is affinity to an apo B protein receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Non-natural lipid particle comprising peptide binding to apo B protein receptor - useful as, e.g. vector for delivering drugs to cancer cells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1998-230637/20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Halbert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            27-SEP-1996;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Apo
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                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local
B; binding site; receptor; cancer; drug delivery; anticancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ₩
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         express this receptor.
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                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
9; Conserv
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                                                                                                                                                                                                                                                                                                                                                             RLTRKRGLK 9
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ž
                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%; Score 44; DB 2.larity 100.0%; Pred. No. 0.17; Conservative 0; Mismatches
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                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          7;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              retinoic acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 2;
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The present sequence represents a specifically claimed Apo B 100 binding site peptide analogue which can be used as a component of a non-naturally occurring, receptor-competent low density lipoprotein (LDL) particle of the present invention. The LDL particle comprises at least 1 peptide component that has at least 1 binding site for an apo B protein receptor and at least 1 lipophilic substituent. Also described in the invention are peptides containing an apo B binding sequence with at least 10% identity with sequences: KARYKNIGH(I) or TRLIFRKRGLK(2), or their dimers. Non-naturally occurring, receptor-competent LDL particles are useful as: (i) drug-targeting vectors for delivering anticancer drugs to cancer cells that express an apo B protein receptor, and (ii) additives for cell culture media especially as growth supplements. Non-naturally occurring, receptor-competent LDL particles do not require the complete apo B sequence, which is large and tends to aggregate, to provide binding affirity for an apo B protein receptor.
                                                                  Sequence
                                                                                                   affinity to
                                                                                                                                                                                                                                                                                                                                                                       Claim 13; Fig
                                                                                                                                                                                                                                                                                                                                                                                                                   Non-natural lipid particle comprising peptide binding to apo B protein receptor - useful as, e.g. vector for delivering drugs to cancer cells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 1998-230637/20.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Halbert GW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          growth supplement; non-natural lipid particle; low density lipoprotein; LDL; receptor component; apo B100 receptor site.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         25-SEP-1997;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (UYST ) UNIV STRATHCLYDE
                                                                                                                                                                                                                                                                                                                                                                                                        express this receptor.
Similarity
9; Conserv
                                                                   22 AA;
100.0%;
ilarity 100.0%;
Conservative (
                                                                                                   an apo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Owens MD,
                                                                                                                                                                                                                                                                                                                                                                      7; 73pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          96GB-00020153
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                                                                                                   W
                                                                                                   protein receptor
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 0
Score 44; DB 2
Pred. No. 0.17;
Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           retinoic acid"
                                 2;
 <u>.</u>
                             Length
 Indels
                                 22;
 <u>,,</u>
 Gaps
 0
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             Ś
                            Query Match
Best Local S
Matches 9
æ
         RLTRKRGLK 9
RLTRKRGLK 16
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RESULT 15
ABR57177
ABR57177
                                   standard; peptide; 23
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Human PDGFR-beta related navigation peptide SEQ ID NO:25

29-AUG-2003

(first entry)

pDGFR-beta; platelet derived growth factor receptor beta; nanoparticle; delivery; encapsulated molecule; cycostatic; antimicrobial; gene therap; sustained delivery; cell proliferation disorder; infectious disease; genetic defect; aberrant gene regulation. therapy;

Homo sapiens

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The present invention describes nanoparticles (I) capable of delivery of CC an encapsulated molecule into a living cell, comprising an encapsulation CC acid homologue sequence (II) encapsulated with EM, where the CC time. (I) have cytostatic and antinicrobial activities, and can be used completed extended period of comparticles are capable of releasing (II) over an extended period of comparticles are capable of releasing (II) over an extended period of complete cacid homologue within a subject, by encapsulating a nucleic acid composition of a subject by sustained delivery and release of a cc homology within (I), and introducing (II) into the subject. (I) can also be of nucleic acid homologue, by encapsulating an isolated nucleic acid condition within EM, so that nanoparticles are formed, and delivering the sequence designed to alleviate symptoms of the medical condition within EM, so that nanoparticles are formed, and delivering the sequence is released over an extended period of time. A pharmaceutical composition comprising (I) can be used for treating a medical condition defect and abservant gene regulation. The nanoparticles are capable of introducing the nucleic acid into the cell very efficiently. The present contains a platelet derived growth factor receptor beta (PDGFR present invention)
                                                                               Matches
                                                                                                   Query Match
Best Local :
                                                                                                                                                      Sequence 23 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Nanoparticles for sustained delivery of encapsulated molecule into a living cell, comprising encapsulation media with biodegradable polymer, and isolated nucleic acid homolog sequence encapsulated with medium.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 13; Page 32; 97pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2003-523294/49.
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                                                                                                 Local
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15 RLTRKRGLK 23
                            1 RLTRKRGLK 9
                                                                             Similarity 9; Conserv
                                                                   ilarity 100.0%; Score 44; DB 6; Length 23; Conservative 0; Mismarchor
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                                                               Gaps
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Search completed: January 12, 2005, 13:25:40 Job time: 83.0323 secs

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Result
No.
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Maximum Match 100%
Listing first 45 summaries
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Perfect score:
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Maximum DB seq length: 200000000
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re greater than or equal to the score of the result being printed,
is derived by analysis of the total score distribution.
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Match
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1: /cgn2_6/ptodata/1/iaa/5A_COMB.pep:*

2: /cgn2_6/ptodata/1/iaa/5B_COMB.pep:*

3: /cgn2_6/ptodata/1/iaa/6A_COMB.pep:*

4: /cgn2_6/ptodata/1/iaa/6B_COMB.pep:*

5: /cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*

6: /cgn2_6/ptodata/1/iaa/backfiles1.pep:*
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Gapop 10.0 , Gapext 0.5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length
                                                                                                                       DB
  US-09-265-222-20
US-09-269-533A-2
US-09-180-422B-13
US-09-180-422B-17
US-09-180-422B-17
US-09-180-422B-17
US-09-180-422B-17
US-09-269-533A-5
US-09-269-533A-6
US-09-079-030-16
US-09-079-030-16
US-09-079-030-21
US-08-333-577-1
PCT-US92-08634-1
US-09-079-030-215
US-09-079-030-215
US-09-079-030-215
US-09-079-030-217
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Sequence 20, Appli
Sequence 2, Appli
Sequence 3, Appli
Sequence 4, Appli
Sequence 85, Appli
Sequence 85, Appli
Sequence 50, Appli
Sequence 50, Appli
Sequence 5, Appli
Sequence 6, Appli
Sequence 166, Appli
Sequence 1, Appli
Sequence 1, Appli
Sequence 1, Appli
Sequence 1, Appli
Sequence 2, Appli
Sequence 213, App
Sequence 214, Appli
Sequence 214, Appli
Sequence 27, Appli
Sequence 1, Appli
Sequence 6, Appli
Sequence 6, Appli
Sequence 7, Appli
Sequence 7, Appli
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RESULT 4
US-09-180-422B-13
, Sequence 13, Application US/09180422B
, Patent No. 6444644
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                                                                                                                                                                       NAME/KEY; misc feature
LOCATION; ()...()
COTHER INFORMATION: Retinoic acid linked at N-terminus of peptide analogue
                                                                                                                                                                      Query Match
Best Local S
                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION NUMBER: PCT/GB97/02610
PRIOR FILING DATE: 1997-09-25
PRIOR APPLICATION NUMBER: GB 9620153.8
PRIOR FILING DATE: 1996-09-27
NUMBER OF SEQ ID NOS: 7
SEQ ID NOS: 3
SEQ ID NOS: 3
SEQ ID NOS: 3
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                                                                                                                                                                                                                                                           LENGTH: 1
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
NAME/KEY: misc feature
OCCATION: (). ()
OTHER INFORMATION: Synthesised peptide analogue of the Apo B 100 binding site
LOCATION: (). ()
LOCATION: (). ()
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                                                                                                                                                                                                                           OTHER INFORMATION: Cholesterol linked at C-terminus of peptide analogue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME/KEY: misc feature
| IOCATION: ()...()
| OTHER INFORMATION: Apo B binding site sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Baillie, George
TITLE OF INVENTION: No. 6670452-Naturally CURRENT APPLICATION NUMBER: US/09/269,533A
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PRIOR FILING DATE: 1997-09-25
PRIOR APPLICATION NUMBER: GB 9620153.8
PRIOR FILING DATE: 1996-09-27
NUMBER OF SEQ ID NOS: 7
SOFTWARE: Patentin version 3.0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH: 11
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
                                                                                                                       1 RLTRKRGLK 9
                                                                                                                                   h
Similarity 100.0%; Score 44; DB 4; L
9; Conservative 0; Mismatches 0;
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_No. 6670452
                                                                                               RLTRKRGLK 10
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Similarity 100.0%; Score 44; DB 4; Length 11;
9; Conservative 0; Mismatches 0; Indels
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Owens, Moira
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Wo. 6670452-Naturally Occurring Lipoprotein Particle
                                                                                                                                                     DB 4; Length 11;
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SEQ ID NO 4
LENGTH: 13
TYPE: PRT
ORGANISM: Artificial Sequence
                                                                            CURRENT APPLICATION NUMBER: US/09/269,533A
CURRENT FILING DATE: 1999-06-01
PRIOR APPLICATION NUMBER: PCT/GB97/02610
PRIOR PLING DATE: 1997-09-25
PRIOR PRILING DATE: 1997-09-25
PRIOR PILING DATE: 1996-09-27
NUMBER OF SEQ ID NOS: 7-09-27
                                                                                                                                                                          APPLICANT: University of Strathclyde APPLICANT: Halbert, Gavin APPLICANT: Owens, Moira APPLICANT: Baille, George FILE REFERENCE: P07885US
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US-09-269-533A-4
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MOLECULE TYPE: peptide
SEQUENCE DESCRIPTION: SEQ ID NO: 13:
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WAME/KEY: misc_feature
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SEQUENCE CHARACTERISTICS:
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s 9; Conservative 0
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APPLICANT: BRUCKDORFER, KARL R
ETTELAIE, CAMILLE
                                                                                                                                                                                                                                                                INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME: SADOFF, B.J.
REGISTRATION NUMBER: 36663
REFERENCE/DOCKET NUMBER: 1:
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US/09/180,422B
FILING DATE: 07-Dec-1998
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                            1 RLTRKRGLK 9
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQUENCES: 27
CORRESPONDENCE ADDRESS:
ADDRESSE: NIXON & VANDERHYE, P.C.
STREET: 1100 NORTH GLEBE ROAD, 8TH FLOOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION: ANTICOAGULANT PEPTIDE FRAGMENTS DERIVED
                                                                                                                                                                                                                                                                                                                                                        RLTRKKGLK 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH: 12 amino acids
TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOFTWARE: PatentIn Release #1.0, Version #1.25
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COUNTRY: USA
                                                                                                                                                      George
No. 6670452-Naturally Occurring Lipoprotein Particle
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                                                                                                                                                                                                                                                                                                                                                                                                  Score 44; DB 4; Length 12; Pred. No. 0.032;
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RESULT 7
US-09-180-422B-17
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SEQ ID NO 85
LENGTH: 15
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
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Best Local Similarity
"herhes 9; Conserva
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US-09-269-533A-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-08-981-122-85
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                                                                                                                                                                                                                                                                                               Sequence 17, Application US/09180422B
PATENT NO. 6444644
GENERAL INFORMATION:
APPLICANT: BRUCKDORFER, KARL R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OTHER INFORMATION: Sequence of a peptide synthesized in Comparative Example 7 from Patent No. 6127339
OTHER INFORMATION: L-form F-moc amino acids by solid phase method using an OTHER INFORMATION: automatic peptide synthesizer (9050 plus peptide synthesizer)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local
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PRIOR APPLICATION NUMBER: JP 7-176904
PRIOR FILING DATE: 1995-06-21
PRIOR APPLICATION NUMBER: PC7/JP96/017
PRIOR FILING DATE: 1996-06-21
NUMBER OF SEQ ID NOS: 90
SCOTTON OF SECULIARY S
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PUBLICATION INFORMATION: PYPETING BYNTHEBIZEL (1900) PIUS PEPTIGE SYNTHES AUTHORS: Urban Olsson et al.
TITLE: Binding of a synthestic apolipoprotein B-100 peptide and peptide
TITLE: analogues to chondroitin 6-sulfate: Effects of the lipid environment
JOURNAL: Biochemistry
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILE REFERENCE:
CURRENT APPLICATION NUMBER: US/08/981,122B
CURRENT FILING DATE: 1997-12-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Hatanaka, Yoshihiro
APPLICANT: Aritomi, Masaharu
TITLE OF INVENTION: Peptide for binding thereto a low density lipoprotein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VOLUME: 32
PAGES: 1858-1865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LOCATION: ()...()
OTHER INFORMATION: Synthesised peptide analogue of the Apo B 100 binding site NAME/KEY: misc feature
LOCATION: ()...()
CORRESPONDENCE ADDRESS:
ADDRESSEE: NIXON & VANDERHYE, P.C.
STREET: 1100 NORTH GLEBE ROAD, 8TH FLOOR
                                                                                                                                                                     TITLE OF INVENTION: ANTICOAGULANT PEPTIDE FRAGMENTS DERIVED FROM APOLIPOPROTEIN B-100
                                                                                                                                           NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 RLTRKRGLK 9
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US-09-079-030-205
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GENERAL INFORMATION:
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                             SOFTWARE: PATENTIN Release #1.0, Verent Application Number: US/09/079,030
APPLICATION NUMBER: US/09/079,030
APPLICATION NUMBER: US/09/079,030
APPLICATION NUMBER: US/09/079,030
APPLICATION: ACCOUNT HERE APPLICATION: APPLICATION: APPLICATION: NAME: MCMIllian, Nabeela R. REGISTRATION NUMBER: P-43,363
REFERENCE/DOCKET NUMBER: ARAG:003
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEPHONE: 7038164000
TELEFAX: 7038164100
INFORMATION FOR SEQ ID NO: 17:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Guevera, Jr., Juan G.
APPLICANT: Hoogeveen, Ron C.
APPLICANT: Moore, Paul J.
TITLE OF INVENTION: LIPOPROTEINS AS NUCLEIC ACID
TITLE OF INVENTION: VECTORS FOR TRANSFECTION OF E
                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IEM PC comparible
OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US/09/180,422B
FILING DATE: 07-Dec-1998
CLASSIFICATION: CUNKNOWN>
ATTORNEY/AGENT INFORMATION:
NAME: SADOFF, B.J.
REFERENCE/DOCKET NUMBER: 36663
REFERENCE/DOCKET NUMBER: 117-268
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity 100.0%;
                                                                                                                                                                                                                                                                                                                            COUNTRY: USA
ZIP: 77210
                                                                                                                                                                                                                                                                                                                                                                     STATE:
                                                                                                                                                                                                                                                                                                                                                                                        CITY: Houston
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC comparible
COPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TOPOLOGY: linear MOLECULE TYPE: peptide SEQUENCE DESCRIPTION: SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE CHARACTERISTICS:
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STATE: VA
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P.O. Box 4433
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512/418-3000
512/474-7577
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Pred. No. 0.039;
, Mismatches 0; Indels
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EUKARYOTIC CELLS
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APPLICANT: Owens, Woira

APPLICANT: Baillie, George

TITLE OF INVENTION: No. 6670452-Naturally Occurring Lipoprotein Particle

FILE REFERENCE: P07885US

CURRENT APPLICATION NUMBER: US/09/269,533A

CURRENT FILING DATE: 199-06-01

PRIOR APPLICATION NUMBER: CCT/GB97/02610

PRIOR APPLICATION NUMBER: GB 9620153.8

PRIOR FILING DATE: 1997-09-25

PRIOR FILING DATE: 1996-09-27

SOFTWARE: Patentin version 3.0

LENGTH: 22

TYDE: PRT

ORGANISM: Artificial Sequence

FEATURE:
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US-09-269-533A-6
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Best Local Similarity
Matches 9; Conserva
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LOCATION: ()..()

OTHER INFORMATION: Cholesterol linked at C-terminus of peptide analogue

NAME/KEY: misc feature

LOCATION: ()..()

OTHER INFORMATION: Retinoic acid linked at N-terminus of peptide analogue

US-09-269-533A-5
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US-09-269-533A-5
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                                                                                                                                                      Sequence 6, Application US/09269533A Patent No. 6670452
                                                                                                                                    GENERAL INFORMATION:
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       APPLICANT: University of Strathclyde
APPLICANT: Halbert, Gavin
APPLICANT: Owens, Moira
APPLICANT: Owens, Moira
APPLICANT: Baillie, George
TITLE OF INVENTION: No. 6670452-Naturally Occurring Lipoprotein Particle
FILE REFERENCE: P07885US
CURRENT APPLICATION NUMBER: US/09/269,533A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 100.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: University of Strathclyde APPLICANT: Halbert, Gavin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             IOCATION: ()..()
OTHER INFORMATION: Synthesised peptide analogue of the Apo B 100 binding site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME/KEY: misc_feature
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                                                                                                                                                                                                                                                                                                                                     100.0%; Score 44; DB 4; ilarity 100.0%; Pred. No. 0.056; Conservative 0; Mismatches
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US-09-079-030-166
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US-09-079-030-166
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 Query Match
Best Local Similarity
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Best Local &
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
                                                                                                                                                                                           ATTORNEY AGENT INFORMATION:
NAME: McMillian, Nabeela R.
REGISTRATION NUMBER: P-43,3
REFERENCE/DOCKET NUMBER: AR
                                                                                                                                                                                                                                                  SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/079,03(
FILING DATE: Concurrently Herewit
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT FILING DATE: 1999-06-01
PRIOR APPLICATION NUMBER: PCT/GB97/02610
PRIOR FILING DATE: 1997-09-25
PRIOR APPLICATION NUMBER: GB 9620153.8
PRIOR FILING DATE: 1996-09-27
NUMBER OF SEQ ID NOS: 7
                                                                                                                                                               TELECOMMUNICATION INFORMATION: TELEPHONE: 512/418-3000
                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/NS-DOS
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NAME/KEY: misc feature
LOCATION: ()...()

OTHER INFORMATION: Synthesised peptide analogue of the Apo B 100
NAME/KEY: misc feature
LOCATION: ()...()
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION: LIPOPROTEINS AS NUCLEIC ACID DELIVERY TITLE OF INVENTION: VECTORS FOR TRANSFECTION OF EUXARYOTIC CELLS CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OTHER INFORMATION: Retinoic acid linked at N-terminus of peptide analogue
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 22
TYPE: PRT
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                                                             STRANDEDNESS:
TOPOLOGY: 11:
                                                                                                                                                                                                                                                                                                                                                                                        STATE: Texas
COUNTRY: USA
ZIP: 77210
                                                                                                                                                                                                                                                                                                                                                                                                                                   CITY: Houston
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o. 6635623
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Hoogeveen,
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   100.0%;
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 Score
Pred.
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Pred. No.
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No.
                                                                                                                                                                                                                                                                                                             Version #1.30
DB 4;
0.089;
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Length 36;

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RESULT 13
US-07-959-946-1
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US-09-079-030-98
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US-09-079-030-98
                                                                                                                                                                          Sequence 1, Appli
Patent No. 540803
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GENERAL INFORMATI
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                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEPAX: 512/47.
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
SECURICE STANDARD ACIDS
FRIGHT: 51 amino acids
                                                                                                                                            GENERAL INFORMATION:
APPLICANT: Smith, Richard K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version
CURRENT APPLICATION DATA:
                                         APPLICANT: Koduri, Raju
APPLICANT: Young, Stephen G.
APPLICANT: Witztum, Joseph L.
APPLICANT: Curtiss, Linda K.
TITLE OF INVENTION: Lipoprotein Assays Using Antibodies to a
TITLE OF INVENTION: Pan Native Epitope and Recombinant Antigens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATTORNEY/AGENT INFORMATION:
NAME: MCM1111an, Nabeela R.
REGISTRATION NUMBER: P-43,363
REFERENCE/DOCKET NUMBER: ARAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELECOMMUNICATION INFORMATION: TELEPHONE: 512/418-3000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Hoogeveen, Ror
APPLICANT: Moore, Paul J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: FILING DATE: Concur CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COUNTRY: US
ZIP: 77210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CITY: Houston
                                                                                                                                                                                                                                                                                                                                                                                                                                       STRANDEDNESS:
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Dressler, Goldsmith, Shore, Sutker &
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Pred. No. 0.12;
Mismatches
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RESULT 14
US-08-333-577-1
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ZIP: 60601

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/07/959,946

FILING DATE: 19921008

CLASSIFICATION: 435

PRIOR APPLICATION DATA:

APPLIC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
APPLICANT: Smith, Richard K.
APPLICANT: Koduri, Raju
APPLICANT: Young, Stephen G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
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                                                                     SOFTWARE: Patentin Release #1.0, CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/333,577 FILING DATE:
                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION: Lil
TITLE OF INVENTION: Par
NUMBER OF SEQUENCES: 20
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Witztum, Joseph L.
APPLICANT: Curtiss, Linda K.
TITLE OF INVENTION: Lipoprotein Assays Using Antibodies to a
TITLE OF INVENTION: Pan Native Epitope and Recombinant Antigens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEPHONE: (312)616-5400
CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                     ADDRESSEE: Dressler, Goldsmith, Shore, Sutker ADDRESSEE: Milnamow, Ltd.
STREET: 180 No. 5786206th Stetson, Suite 4700 CITY: Chicago STATE: Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity 100.0%;
les 9; Conservation
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                                                                                                                                                                                                                                                                                                                                                                                              COUNTRY:
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STREET: 180 No. 5408038th Stetson, Suite 4700
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(317) TO NO: 1:
                                                                                                            US/08/333,577
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Pred. No. 0.81;
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TELEFAX: (312)616-5460
; INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 377 amino acids
TYPE: AMINO ACID
TYPE: AMINO ACID
TOPOLOGY: linear
MOLECULE TYPE: protein
PCT-US92-08634-1
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REGISTRATION NUMBER: 29,381
REPERENCE/DOCKET NUMBER: SCRF
TELECOMMUNICATION INFORMATION:
TELEPHONE: (312)616-5460
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 377 amino acids
TYPE: amino acids
TYPE: amino acids
TYPE: linear
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; MOLECULE TYPE: protein
US-08-333-577-1
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PCT-US92-08634-1
                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Ploppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US92/08634
FILING DATE: 19921009
CLASSIFICATION LOWER: US 07/901,706
PRIOR APPLICATION NUMBER: US 07/901,706
APPLICATION NUMBER: US 07/901,706
FILING DATE: 18-UN-1992
ATTORNEY/AGENT INFORMATION:
NAME: Gamson, Edward P.
REGISTRATION NUMBER: 29,381
REFERENCE/DOCKET NUMBER: 29,381
REFERENCE/DOCKET NUMBER: TELECOMMUNICATION INFORMATION:
TELEEPHONE: (312)616-5400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 1, Application PC/TUS9208634
GENERAL INFORMATION:
APPLICANT: Smith, Richard K.
APPLICANT: Koduri, Raju
APPLICANT: Voung, Stephen G.
APPLICANT: Witztum, Joseph L.
APPLICANT: Witztum, Joseph L.
APPLICANT: Curtiss, Linda K.
TITLE OF INVENTION: Lipoprotein Assays Using Antibodies to a
TITLE OF INVENTION: Pan Native Epitope and Recombinant Antigens
NUMBER OF SEQUENCES: 20
CORRESPONDENCE ADDRESS:
    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 100.0%; Score 44; DB 1; Length 377; Best Local Similarity 100.0%; Pred. No. 0.81; Matches 9; Conservative 0; Mismatches 0; Indels
                                               Query Match
y Match 100.0%; Score 44; DB 5; Length 377; Local Similarity 100.0%; Pred. No. 0.81; hes 9; Conservative 0; Mismatches 0; Indels
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CITY: Chicago
STATE: Illinois
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Qy 1 RLTRKRGLK 9
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Db 146 RLTRKRGLK 154
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Search completed: January 12, 2005, 13:33:16 Job time: 21.1935 secs

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Result
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Maximum Match 100%
Listing first 45 summaries
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Maximum DB
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                                                                                                                                                                                                                                                                                                                                                                                                                                        Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                               Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           seq length: 0
seq length: 2000000000
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1: /cgn2=6/ptodata/1/pubpaa/US07 PUBCOMB.pep:*

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3: /cgn2=6/ptodata/1/pubpaa/US06 NEW PUB.pep:*

4: /cgn2=6/ptodata/1/pubpaa/US07 NEW PUB.pep:*

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16: /cgn2=6/ptodata/1/pubpaa/US10C PUBCOMB.pep:*

18: /cgn2=6/ptodata/1/pubpaa/US10C NEW PUB.pep:*

19: /cgn2=6/ptodata/1/pubpaa/US10 NEW PUB.pep:*

19: /cgn2=6/ptodata/1/pubpaa/US10 NEW PUB.pep:*

19: /cgn2=6/ptodata/1/pubpaa/US10 NEW PUB.pep:*

10: /cgn2=6/ptodata/1/pubpaa/US10 NEW PUB.pep:*
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Match Length DB
                            100.0
100.0
100.0
100.0
100.0
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Gapop 10.0 , Gapext 0.5
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Copyright (c) 1993 - 2005
       9 9 9 17
7 US-10-657-404A-8
US-09-823-418-20
US-09-823-965-20
US-09-269-533A-2
US-09-269-533A-3
US-09-38-902-2
0 US-09-31-375A-76
4 US-10-657-404A-2
7 US-10-657-404A-3
US-09-269-533A-4
US-09-269-533A-4
US-09-269-533A-5
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Compugen Ltd
                   Sequence 8, Appli
Sequence 20, Appl
Sequence 20, Appli
Sequence 2, Appli
Sequence 3, Appli
Sequence 2, Appli
Sequence 76, Appli
Sequence 2, Appli
Sequence 3, Appli
Sequence 3, Appli
Sequence 4, Appli
Sequence 4, Appli
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| 4 5 | 44 | 43 | 42 | 41 | 40 | 39 | 38 | 37 | 36 | 35 | 34 | IJ IJ | 32 | ω | 30 | 29 | 28 | 27 | 26 | 25 | 24 | 23 | 22 | 21 | 20 | 19 | 18 | 17 | 16 | 15 | 14 |
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| 38 | 38 | 38 | 38 | 39 | 39 | 39 | 39 | 39 | 39 | 39 | 39 | 39 | 39 | 40 | 40 | 40 | 40 | 44 | 44 | 44 | 44 | 44 | 44 | 44 | 44 | 44 | 44 | 44 | 44 | 44 | 44 |
| 86.4 | 86.4 | 86.4 | 86.4 | 88.6 | 8 | œ | 88.6 | 8 | 88.6 | 8 | 88.6 | æ | 8 | | 90.9 | 90.9 | • | 100.0 | 100.0 | 100.0 | ٠ | • | ٠ | 100.0 | 8 | 8 | 8 | 8 | 100.0 | 00. | 100.0 |
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| -09-822-9 | 9-823- | -09-823-418- | US-09-823-418-2 | US-09-822-965-12 | 9-822-965- | 2-965- | σ | 22-965- | 23-418- | US-09-823-418-11 | US-09-823-418-9 | US-09-823-418-7 | -09-823-418- | -09-822-96 | US-09-822-965-1 | US-09-823-418-6 | -823-4 | 10-428-817A | -10-741-601- | -10-741-6 | 10-403-902A | 09-751-7084 | -802-64 | 9-870-759-1 | -10-741-601-43 | 9-864-761-4 | US-10-333-313-1 | 10-657-404A- | 10-657-404A- | US-10-657-404A-5 | US-09-269-533A-6 |
| e 2, | e 4, | e u | æ | equence 12, | e 11, | e 9, | e 7, | e 5, | e 12, | 11, | e 9, | æ | o u | ٥, | ٢ | 6 | 1, Appli | 124, | æ | e 432, | 32, | O | e 32, | 128, 7 | e 43 | 46837, | e 1, | e 9, | Sequence 6, Appli | ce 5, | Sequence 6, Appli |

ALIGNMENTS

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                                                                                                                                                          ; OTHER INFORMATION: Apo B binding site sequence US-10-657-404A-8
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APPLICANT: Baille, George
; TITLE OF INVENTION: NOn-Naturally Occurring Lipoprotein Particle
; FILE REFERENCE: P07885US-CIP
; CURRENT APPLICATION NUMBER: US/10/657,404A
; CURRENT FILING DATE: 2003-09-08
; PRIOR APPLICATION NUMBER: PCT/GB97/02610
; PRIOR FILING DATE: 1997-09-25
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                                                                            Query Match
Best Local S
Matches 9
                                                                                                                                                                                                                                                         SEQ ID NO 8
LENGTH: 9
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                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION NUMBER: GB 9620153.8 PRIOR FILING DATE: 1996-09-27 NUMBER OF SEQ ID NOS: 9
SOFTWARE: Patentin version 3.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: University of Strathclyde APPLICANT: Halbert, Gavin APPLICANT: Owens, Moira
                                                                                                                                                                                                TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
                                                                            Similarity
9; Conserva
RLTRKRGLK 9
                     RLTRKRGLK 9
                                                                              Conservative
                                                                          100.0%; Score 44; DB 17; 100.0%; Pred. No. 1.5e+06; tive 0; Mismatches 0;
                                                                                                                Length 9;
                                                                              Indels
                                                                            0;
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US-09-823-418-20

Sequence 20, Application No. US20 GENERAL INFORMATION

Application US/09823418 o. US20010024797A1

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US-09-822-965-20
    Query Match
100.0%; Score 44; DB 9; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.12;
Matches 9; Conservative 0; Mismatches 0; Indels
                                                                                                                   FEATURE:
NAME/KEY: BINDING
LOCATION: (1)...(10)
OTHER INFORMATION: Putativ.
OTHER INFORMATION: human a
                                                                                                                                                                                                                                                                             NUMBER OF SEQ ID NOS: 25
SOFTMARE: FastSEQ for Windows Version 4.0
SEQ ID NO 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-822-965-20
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CURRENT APPLICATION NUMBER: US/09/823,418
CURRENT FILING DATE: 2001-03-29
PRIOR FILING DATE: 199-03-05
PRIOR PILING DATE: 1999-03-05
PRIOR APPLICATION NUMBER: US 60/077,618
PRIOR APPLICATION NUMBER: US 60/077,618
PRIOR PILING DATE: 1998-03-10
SEQ ID NOS: 25
SOFTWARE: FASTSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                         APPLICANT: Innerarity, Thomas
APPLICANT: Boren, Jan
TITLE OF INVENTION: METHODS AND TOOLS FOR IDENTIFYING
TITLE OF INVENTION: COMPOUNDS WHICH MODULATE ATHEROSCLEROSIS BY IMPACTING
FILE REFERENCE: 220072059710
CURRENT APPLICATION NUMBER: US/09/822,965
PRIOR APPLICATION NUMBER: US 09/265,222
PRIOR FILING DATE: 1999-03-05
PRIOR FILING DATE: 1999-03-05
PRIOR FILING DATE: 1999-03-05
PRIOR PRICATION NUMBER: US 60/077,618
NTMMSPD OF SEO IN NOS: 75
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Best Local S
                                                                                                                                                                                                                          TYPE: PRT
ORGANISM: Homo sapiens
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OTHER INFORMATION: Putative proteoglycan binding site of wild-type
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TYPE: PRT
ORGANISM: Homo sapiens
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APPLICANT: Boren, Jan
TITLE OF INVENTION: METHODS AND TOOLS FOR IDENTIFYING COMPOUNDS
TITLE OF INVENTION: WHICH MODULATE ATHEROSCLEROSIS BY IMPACTING
TITLE OF INVENTION: LDL-PROTEOGLYCAN BINDING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY: BINDING
LOCATION: (1)...(1)
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9; Conserv
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                                                                                                  Putative proteoglycan binding site of wild-type human apo-B100 protein
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SOFTWARE: PatentIn version 3.0
SEQ ID NO 3
LENGTH: 11
TYPE: PRT
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Best Local S
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                                                                                                                                                                                                                       APPLICANT: Baillie, George
TITLE OF INVENTION: NO. US20020147304A1-Naturally Occurring Lipoprotein Particle
FILE REFERENCE: P07885US
CURRENT APPLICATION NUMBER: US/09/269,533A
CURRENT FILING DATE: 1999-06-01
PRIOR APPLICATION NUMBER: PCT/GB97/02610
PRIOR FILING DATE: 1997-09-25
PRIOR FILING DATE: 1997-09-25
                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:

APPLICANT: University of Strathclyde
APPLICANT: Halbert, Gavin
APPLICANT: Owens, Moira
APPLICANT: Baille, George
                                     LOCATION: ()...()
OTHER INFORMATION: Synthesised
NAME/KBY: misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 3, Application US/09269533A Patent No. US20020147304A1
OTHER INFORMATION: Cholesterol linked at C-terminus of peptide analogue
                                                                                             FEATURE:
NAME/KEY: misc_feature
                                                                                                                       ORGANISM: Artificial Sequence
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US-09-269-533A-2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OTHER INFORMATION: Apo B binding site sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM: Artificial Sequence FEATURE:
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TITLE OF INVENTION: No. US20020147304A1-Naturally Occurring Lipoprotein Particle
FILE REFERENCE: P07885US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY: misc feature LOCATION: ()..()
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9; Conservative
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o. US20020147304A1
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Owens, Moira
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                                                      peptide analogue of the
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Pred. No.
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US-09-398-902-2
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                                                                            CURRENT APPLICATION NUMBER: US/09/931,375A
CURRENT FILING DATE: 2001-08-17
PRIOR APPLICATION NUMBER: US 60/304,851
PRIOR FILING DATE: 2001-07-13
PRIOR APPLICATION NUMBER: US 60/234,337
PRIOR APPLICATION NUMBER: US 60/234,337
PRIOR FILING DATE: 2000-09-22
PRIOR PRIOR PRICING DATE: 2000-09-18
PRIOR PILING DATE: 2000-08-18
PRIOR PILING DATE: 2000-08-18
NUMBER OF SEQ ID NOS: 89
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                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 76, Application US/09931375A Publication No. US20030027151A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 2, Application US/09398902
Patent No. US20020164679A1
                       SEQ ID NO 76
LENGTH: 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
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Matches 9; Conservative 0
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APPLICANT: Bevan, Ruth
APPLICANT: Bevan, Ruth
APPLICANT: Griffiths, Helen
TITLE OF INVENTION: OXIDISED FRAGMENTS OF APOLIPOPROTEIN B AND THEIR USE
TILE REFERENCE: 3523P003
CURRENT APPLICATION NUMBER: US/09/398,902
CURRENT FILING DATE: 1999-09-20
PRIOR APPLICATION NUMBER: PCT/GB98/00677
PRIOR PILING DATE: 1998-03-20
PRIOR PILING DATE: 1998-03-20
PRIOR PILING DATE: 1997-03-20
                                                                                                                                                                                                                                                                                  APPLICANT: WARMAN, Matthew L.
APPLICANT: GONG, Yaogin
APPLICANT: OLSEN Bjorn R.
APPLICANT: RAWADI, Georges
APPLICANT: ROMAN-ROMAN, Sergio
APPLICANT: ROMAN-ROMAN, Sergio
TITLE OF INVENTION: REGULATOR GENE AND SYSTEM USEFUL
TITLE OF INVENTION: OSTEOPOROSIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQ ID NOS: 3
                                                                                                                                                                                                                                                                      FILE REFERENCE: 38464-0004
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY: misc_feature
LOCATION: ()..()
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ilarity 100.0%;
Conservative 0;
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Pred. No. 0.13;
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Pred. No. 0.13;
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ORGANISM: Artificial Sequence FEATURE:
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Query Match
Best Local Similarity
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US-10-657-404A-2
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US-10-358-594-2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILE REFERENCE: 3523P003
CURRENT APPLICATION NUMBER: US/10/358,594
CURRENT APPLICATION NUMBER: US/09-05
PRIOR APPLICATION NUMBER: US/09/398,902
PRIOR FILING DATE: 1999-09-20
PRIOR APPLICATION NUMBER: PCT/GB98/00677
PRIOR FILING DATE: 1998-03-20
PRIOR APPLICATION NUMBER: GB 9705831.7
                                     SOFTWARE: PatentIn version 3.1 SEQ ID NO 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR FILING DATE: 1997-03-20
NUMBER OF SEQ ID NOS: 3
SOFTWARE: PatentIn version 3.0
SEQ ID NO 2
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                                                                                                                                                                                                                                                                                                                                                   Sequence 2, Application US/10657404A Publication No. US20040235730A1
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                                                                                                                                  APPLICANT: Baillie, George
TITLE OF INVENTION: Non-Naturally Occurring Lipoprotein Particle
FILE REFERENCE: P07885US-CIP
CURRENT APPLICATION NUMBER: US/10/657,404A
CURRENT FILING DATE: 2003-09-08
PRIOR APPLICATION NUMBER: PCT/GB97/02610
PRIOR FILING DATE: 1997-09-25
                                                                            NUMBER OF SEQ ID NOS: 9
                                                                                             PRIOR APPLICATION NUMBER: GB 9620153.8 PRIOR FILING DATE: 1996-09-27
                                                                                                                                                                                                                                                      APPLICANT: University of Strathclyde APPLICANT: Halbert, Gavin APPLICANT: Owens, Moira APPLICANT: Baillie, George
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APPLICANT: Beyan, Ruth
APPLICANT: Griffiths, Helen
TITLE OF INVENTION: OXIDISED FRAGMENTS OF APOLIPOPROTEIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM: Homo sapiens
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TYPE: PRT
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ilarity 100.0%;
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Pred. No. 0.13;
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Pred. No. 0.13;
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US-09-269-533A-4
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; OTHER INFORMATION: Retinoic acid linked at N-terminus of peptide analogue
US-10-657-404A-3
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Patent No. US20020147304A1
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US-10-657-404A-3
                                                           APPLICANT: Halbert, Gavin
APPLICANT: Owens, Moira
APPLICANT: Owens, Moira
APPLICANT: Owens, Moira
APPLICANT: Baillie, George
TITLE OF INVENTION: NO. US20020147304A1-Naturally Occurring Lipoprotein Particle
CURLE REFERENCE: P07885US
CURRENT APPLICATION NUMBER: US/09/269,533A
CURRENT FILING DATE: 1999-06-01
CURRENT FILING DATE: 1999-06-01
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; OTHER INFORMATION: Apo
US-10-657-404A-2
PRIOR APPLICATION NUMBER: PCT/GB97/02610
PRIOR FILING DATE: 1997-09-25
PRIOR APPLICATION NUMBER: GB 9620153.8
PRIOR FILING DATE: 1996-09-27
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APPLICANT: Halbert, Gavin
APPLICANT: Owens, Moira
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Best Local :
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PRIOR FILING DATE: 1996-09-27
NUMBER OF SEQ ID NOS: 9
SOFTWARE: PatentIn version 3.1
SEQ ID NO 3.
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Best Local S
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APPLICANT: Owens, Moira
APPLICANT: Baillie, George
TITLE OF INVENTION: Non-Naturally Occurring Lipoprotein Particle
FILE REFERENCE: P07085US-CIP
CURRENT APPLICATION NUMBER: US/10/657,404A
CURRENT FILING DATE: 2003-09-08
PRIOR APPLICATION NUMBER: PCT/GB97/02610
PRIOR FILING DATE: 1997-09-25
PRIOR FILING DATE: 1997-09-25
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APPLICANT: Halbert, Gavin
APPLICANT: Owens, Moira
APPLICANT: Baillie, George
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OTHER INFORMATTON: Cholesterol linked at C-terminus of peptide analogue
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OTHER INFORMATION: Synthesised peptide analogue of the Apo B 100 binding site
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TYPE: PRT
ORGANISM: Artificial Sequence
PEATURE:
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Pred. No.
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US-09-269-533A-5

Sequence 5, Application US/09269533A
Patent No. US20020147304A1
GENERAL INFORMATION:
APPLICANT: University of Strathclyde
APPLICANT: Halbert, Gavin

APPLICANT: APPLICANT: APPLICANT:

Halbert, Gavi Owens, Moira Baillie, Geor

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RESULT 13
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                                                                                        Query Match
Best Local Similarity 100.
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SEQ ID NO 4
LENGTH: 13
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Publication No. US20040235730A1
GENERAL INFORMATION:
APPLICANT: University of Strathclyde
APPLICANT: Halbert, Gavin
APPLICANT: Owens, Moira
APPLICANT: Baillie, George
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Matches
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PRIOR FILING DATE: 1997-09-25
PRIOR APPLICATION NUMBER: GB 9620153.8
PRIOR FILING DATE: 1996-09-27
NUMBER OF SEQ ID NOS: 9
                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Baillie, George
TITLE OF INVENTION: Non-Naturally Occurring Lipoprotein Particle
FILE REFERENCE: P07885US-CIP
CURRENT APPLICATION NUMBER: US/10/657,404A
CURRENT FILING DATE: 2003-09-08
                                                                                                                                                          NAME/KEY: misc feature
OTHER INFORMATION: Synthesised peptide analogue of the Apo B 100 binding site
FEATURE: misc feature
NAME/KEY: misc feature
OTHER INFORMATION: Retinoic acid linked at N-terminus of peptide analogue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
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LOCATION: ()...()
OTHER INFORMATION: Retinoic acid linked at N-terminus of peptide analogue
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nes 9; Conserv
                                        RLTRKRGLK 12
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100.0%; Pred. No.
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US-09-269-533A-6
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Best Local Similarity 100.0%;
Matches 9; Conservative (
                                                                           Query Match
Best Local
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LENGTH: 22
                                                             Matches
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                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT FILING DATE: 1999-06-01
PRIOR APPLICATION NUMBER: PCT/GB97/02610
PRIOR FILING DATE: 1997-09-25
PRIOR APPLICATION NUMBER: GB 9620153.8
PRIOR FILING DATE: 1996-09-27
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PRIOR FILING DATE: 1997-09-25
PRIOR APPLICATION NUMBER: GB 9620153.8
PRIOR FILING DATE: 1996-09-27
NUMBER OF SEQ ID NOS: 7
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Baillie, George
TITLE OF INVENTION: No. US20020147304A1-Naturally Occurring Lipoprotein Particle
FILE REFERENCE: P07885US
                                                                                                                            NAME/KEY: misc feature
LOCATION: ()...()
OTHER INFORMATION: Synthesised peptide analogue of the Apo B 100 binding
NAME/KEY: misc feature
LOCATION: ()...()
OTHER INFORMATION: Retinoic acid linked at N-terminus of peptide analogue
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APPLICANT: Halbert, Gavin
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OTHER INFORMATION: Synthesised peptide analogue of the Apo B 100 binding site
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TYPE: PRT
ORGANISM: Artificial Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Baillie, George
TITLE OF INVENTION: Non-Naturally Occurring Lipoprotein Particle
FILE REFERENCE: P07885US-CIP
                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION NUMBER: GB 9620153.8 PRIOR FILING DATE: 1996-09-27 NUMBER OF SEQ ID NOS: 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION NUMBER: US/10/657,404A CURRENT FILING DATE: 2003-09-08 PRIOR APPLICATION NUMBER: PCT/GB97/02610 PRIOR FILING DATE: 1997-09-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: University of Strathclyde APPLICANT: Halbert, Gavin
                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: PatentIn version 3.1
                                                                                                                                                                  OTHER INFORMATION: Retinoic acid linked at N-terminus of peptide analogue
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NAME/KEY: misc_feature
OTHER INFORMATION: Cholesterol linked at C-terminus of peptide analogue
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OTHER INFORMATION: Synthesised peptide analogue of the Apo B 100 binding site
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NAME/KEY: misc_feature
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C;Accession: C60950 R;Iaw, A.; Scott, J. J. Lipid Res 31, 1109-1120, 1990 A;Title: A cross-species comparison of the apolipopro A;Reference number: A60950; MUID:90324804; PMID:23739 A;Accession: C60950 A;Molecule type: DNA A;Residues: 1-269 <LAM> A;Cross-references: UNLPROT:060537; UNIPROT:Q60536 C;Superfamily: apolipoprotein B R;Pape, M.E.; Castle, C.K.; Murray, R.W.; Funk, G.M.; Hunt, C.E.; Marotti, K.R.; Melchio. Biophim. Biophys. Acta 1086, 326-334, 1991 A;Title: Apo B metabolism in the cynomolgus monkey: evidence for post-transcriptional rela;Reference number: S32802; MUID:92075708; PMID:1742325 A;Accession: S32802 Ś apolipoprotein B - crab-eating macaque (fragment) C;Species: Macaca fascicularis (crab-eating macaque) C;Date: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 09-Jul-2004 Ś A;Cross-references: UNIPROT:Q28473; EMBL:X15737; NID:g38047; PIDN:CAA33755.1; PID:g93012: C;Superfamily: apolipoprotein B A;Status: preliminary A;Molecule type: mRNA A;Residues: 1-596 <PAP> C; Accession: S32802 밁 C;Superfamily: apolipoproteın в C;Keywords: atherosclerosis; calcium; cholesterol metabolism; chylomicron; glycoprotein; apolipoprotein B-100 - golden hamster (fragment) C;Species: Mesocricetus auratus (golden hamster) C;Date: 31-Dec-1993 #sequence_revision 31-Dec-1993 C60950 Query Match Matches Matches Best Local Similarity Query Match 217 RLTRKRGLK 225 l Similarity 9; Conserva 1 RLTRKRGLK 9 RLTRKRGLK 9 100.0%; ilarity 100.0%; Conservative 0. Conservative 100.0%; Score 44; DB 2; Length 269; 100.0%; Pred. No. 0.27; 0 0; Score 44; DB 2; Pred. No. 0.54; Mismatches Mismatches apolipoprotein PMID: 2373961 0 0; #text_change 09-Jul-2004 Length 596; Indels Indels w domain that binds to the 0 0 Gaps Gaps 0 0

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A;Molecule type: mRNA
A;Rosidues: 1-272,'N',274-617,'A',619-1217,'E',1219-2091,'V',2093-2364,'T',2366-2679,'Q'
A;Rosidues: 1-272,'N',274-617,'A',619-1217,'E',1219-2091,'V',2093-2364,'T',2366-2679,'Q'
A;Cross-references: GB:X04506; NID:g34330; PIDN:CAA28191.1; PID:g34331
R;Lacw, S. W.; Grant, S.M.; Higuchi, K.; Hospattankar, A.; Lackner, K.; Lee, N.; Brewer Jr
Proc. Natl. Acad. Sci. U.S.A. 83, 8142-8146, 1986
A;Title: Human liver apolipoprotein B-100 cDNA: complete nucleic acid and derived amino-A;Reference number: A94134; MUID:87041416; PMID:3464946
                                                                                                                                                                                     A;Note: 1109-Asp was also found R;Knott, T.J.; Wallis, S.C.; Powell, L.M.; Pease, R.J.; Nucleic Acids Res. 14, 7501-7503, 1986
A;Title: Complete cDNA and derived protein sequence of PA;Reference number: A93639; MUID:87016385; PMID:3763409
A;Accession: A25263
                                                                                                                                                                                                                                                                                                           A;Molecule type: mRNA
A;Residues: 1-11,15-2539,'S',2541-3823,'R',3825-4563 <CLA>
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EMBO J. 5, 3495-3507, 1986
A;Title: The complete sequence and structural analysis of
A;Reference number: A91058; MUID:87161758; PMID:3030729
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A;Residues: 1-617,'A',619-1929,'F',1931-3318,'D',3320-3426,'T',3428-3431,'Q',3433-3731,'A
A;Cross-references: UNIPROT:P04114; UNIPROT:P78402; UNIPROT:P78479; UNIPROT:O9UMNO; UNIF
D:Oladarae C : Hadzoboulou-Cladaras, M.; Nolte, R.T.; Atkinson, D.; Zannis, V.I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    C;Species: Homo sapiens (man)
C;Date: 28-Dec-1987 #sequence revision 28-Dec-1987 #text change
C;Accession: A27850; A25679; Ā25263; A25266; A24320; A24
4452; 161909; I59510; I39474; I39469; I84624; I37179; PS0058
R;Ludwig, E.H.; Blackhart, B.D.; Pierotti, V.R.; Caiati, L.; For
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A;Title: DNA sequence of the human apolipoprotein B gene
A;Reference number: A27850; MUID:88003974; PMID:3652907
A;Accession: A27850
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C;Superfamily: apolipoprotein B
C;Keywords: atherosclerosis; calcium;
F;435-445/Region: receptor binding
F;646-656/Region: receptor binding
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A;Note: this is a revision to the sequence from reference JH0101
R;Smith, T.J.; Hautama, D.; Maeda, N.
Gene 87, 309-30, 1990
A;Title: Sequence of the putative low-density lipoprotein receptor-binding regions
A;Contents: annotation
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A; Residues: 1-779 <SMI>
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C;Date: 17-Apr-1993
C;Accession: JH0102
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9; Conserv
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Mesocricetus auratus (g
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A24684; A23817;
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A;Reference.
A;Accession: Azyzon.
A;Accession: Azyzon.
A;Molecule type: mRNA
A;Residues: 3846-4298 <SHO>
R;Pfitzner, R; Wagener, R; Stoffel, W.
Biol. Chem. Hoppe-Seyler 367, 1077-1083, 1986
Title: Isolation, expression and characterization of a hum
The company of the company 
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A;Residues: 1671-2323,'PYW',2327-2352,'H',2354-2398 <HARS
A;Cross-references: GB:M1,367, NID:g178731; PIDN:AAA51741.1;
R;Shoulders, C.C.; Myant, N.B.; Sidoli, A.; Rodriguez, J.C.;
Atherosclerosis 58, 277-289, 1985
A;Title: Molecular cloning of human LDL apolipoprotein B cDN;
A;Reference number: A90084; MUID:86130855; PMID:3841481
A;Accession: A29287
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A; Residues: 1282-2721, 2742-3290, 'L',3292-3336, 'N',3338-3948, 'F',3950-3963, 'Y',3965-4180,
A; Cross-references: GB:M5421; NID:9178817; PIDN:AAA31758.1; PID:9178818
R; Hardman, D.A.; Frotter, A.A.; Chen, G.C.; Schilling, J.W.; Sato, K.Y.; Lau, K.; Yamana; Biochemistry 26, 5478-5486, 1987
A; Title: Structural comparison of human apolipoproteins B-48 and B-100.
A; Reference number: A29671; MUID:88050832; PMID:3676265
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A, Title: Analysis of the human apolipoprotein B gene; complete
A, Reference number: A91585; MUID:87191999; PMID:2883086
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A; Molecule type: mRNA
A; Residues: 709-791, 'SSSWKAASHGCPHSAGD', 810-906 <DEE>
A; Cross-references: GB: K03175; NID: 9178821; PIDN: AAA51759.1;
R; Carlsson, P.; Darnfors, C.: Olofsson & C.: ------
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A; Residues: 485-617, 'A',619-1044 < LA2>
A; Cross-references: GB: M12480; NID:g178791; PIDN: AAA51751.1; PID:g178792
R; Protter, A.A.; Hardman, D.A.; Schilling, J.W.; Miller, J.; Appleby, V.; Chen, Proc. Natl. Acad. Sci. U.S.A. 83, 1467-1471, 1986
A; Title: Isolation of a cDNA clone encoding the amino-terminal region of human A; Reference number: A94088; MUID:86149325; PMID:3513177
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A;Residues: 1-97, 'I',99-617,'A',619-941,'YYIWSLPPKP',951-1138,'PTGRLPNCFSNGLICYSLWLHSFQE
A;Cross-references: GB:M14081, NID:9178795; PIDN:AAA51752.1; PID:9553189
Proc. Natl. Acad. Sci. U.S.A. 82, 8340-8344, 1985
A;Title: Human apolipoprotein B-100: cloning, analysis of liver mRNA, and assignment of A;Accession: A24684; MUID:86094221; PMID:3001697
A;Accession: A24684
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A; Residues: 1-291 < PRO>
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A;Cross-references: GB:J02610; NID:g178803; PIDN:AAA35549.1; PID:g178804
A;Note: a total of 2366 residues were confirmed by direct sequencing of tryptic peptides Proc. Natl. Acad. Sci. U.S.A. 83, Sato, K.Y.; Schilling, J.W.; Yamanaka, M.; Hort, Y.J.; HA;Reference number: A24320; MUID:86287319; PMID:3461454
A;Reference number: A24320; MUID:86287319; PMID:3461454
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A;Residues: 1-617,'A',619-703,'P',705-792,'R',794-1270,'S',1272-1866,'G',1868-2036,'N',2
4189-4220,'M',4222-4563 <LAW>
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Cortese, C.;
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A;Molecule type: mRNA
A;Residues: 3056-3159 <MEH>
A;Residues: 3056-3159 <MEH>
A;Residues: 3056-3159 <MEH>
A;Residues: GB:X03045; NID:g28783; PIDN:CAA26850.1; PID:g929609
A;Cross-references: GB:X03045; N.; Law, S.W.; Meglin, N.; Brewer Jr., H.
Biochem. Biophys. Res. Commun. 148, 279-285, 1987
A;Title: Identification of a novel in-frame translational stop codon in
A;Reference number: A29659; MUID:88049670; PMID:2445342
A;Accession: A29659
                                                                                                                                                                                                            A;Title: Human apolipoprotein B: partial amino acid sequence A;Reference number: A22006; MUID:84208786; PMID:6373369 A;Accession: A22006
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A;Note: two RNA species, 14.1kb and 7.5kb in length, were isolated from the human intest
ch encodes the 250K apo8-48, CAA encoding 2180-dln is substituted by the stop codon TAA,
R;Yang, C.; Kim, T.W.; Weng, S.; Lee, B.; Yang, M.; Gotto Jr., A.M.
Proc. Natl Acad Sci U.S.A. 87, 523-5527, 1990
A;Title: Isolation and characterization of sulfhydryl and disulfide peptides of human ap
A;Reference number: A35783; MUID:90319144; PMID:2115173
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A;Note: this mRNA from intestine includes a stop codon created by RNA editing in place
R;Nohrabian, M.; Schumaker, V.N.; Fareed, G.C.; West, R.; Johnson, D.F.; Kirchgessner,
Nucleic Acids Res. 13, 6937-6953, 1985
A;Tittle: Human apolipoprotein B: identification of cDNA clones and characterization of
A;Reference number: A24269; MUID:86041888; PMID:3903660
A;Accession: A24269
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A;Residues: 2129-2179,2181-2235 <HA2>
A;Cross-references: GB:M19471
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A; Molecule type: protein
A; Residues: 51-75;101-110;129-139;158-174;197-207;276-287;298-304;306-314;526-532;538-55
36;1486-1498;1537-1556;1563-1572;1601-1610;1647-1661;1697-1724;1770-1781;1859-1897;1968-
A; Note: these fragments were derived from apo48
R; Hardman, D.A.; Protter, A.A.; Schilling, J.W.; Kane, J.P.
Biochem. Biophys. Res. Commun. 149, 1214-1219, 1987
A; Title: Carboxyl terminal analysis of human B-48 protein confirms the novel mechanism p
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A; Molecule type: mRNA
A; Residues: 'N', 3729-3731,'I', 3733-3875,'A', 3877-3948,'F', 3950-3963,'Y', 3965-3982,'S', 39
A; Cross-references: GB:M12413; NID:g178735; PIDN:AAA51742.1; PID:g178736
R; Chen, S.H.; Habib, G.; Yang, C.Y.; Gu, Z.W.; Lee, B.R.; Weng, S.; Silberman, S.R.; Cai
Science 238, 363-366, 1987
A; Title: Apolipoprotein B-48 is the product of a messenger RNA with an organ-specific in
A; Reference number: A40133; MUID:88018019; PMID:3659919
A; Accession: B40133
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A;Molecule type: mRNA
A;Residues: 4219-4337,'S',4339-4563 <PFI>
                                                                                                                          A; Molecule type: protein A; Residues: 873-892, 'K', 894-896
                                                                                                                                                                                                                                                                                                                                       R;LeBoeuf, R.C.; Miller, C.; 8
FEBS Lett. 170, 105-108, 1984
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Molecule type: mRNA
A; Residues: 2169-2179 < HOS>
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A;Accession: A28002
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A;Reference number: A24738; MUID:86042646; PMID:2932736
A;Accession: A24738
                                                                                      A;Accession: B22006
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A;Molecule type: protein
A;Residues: 28-41;76-97,'I',99-100;175-193;206-215;239-249;259-266;357-399;455-490;512-
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A; Residues: 2165-2179 < CH1>
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protein
,'L',3115-3130,'R',3132-3133,'P',3135-3136,'R' <LE2>
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Balla,
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R;Blackhart, B.D.; Ludwig, E.M.; Pierotti, V.R.; Caiati, L.; Onasch, M.A.; Wallis, S.C.;
J. Biol. Chem. 261, 15364-15367, 1986
A;Title: Structure of the human apolipoprotein B gene.
A;Reference number: A92564; MUID:87057153; PMID:2946672
A;Contents: annotation; gene structure
R;Wagener, R.; Pfitzner, R.; Stoffel, W.
Biol. Chem. Hoppe-Seyler 369, 419-425, 1987
A;Title: Studies on the organization of the human apolipoprotein B 100 gene.
A;Geference number: A90715; MUID:87271140; PMID:2886136
A;Contents: annotation; gene structure
R;Weisgraber, K.H.; Rall Jr., S.C.
J. Biol. Chem. 262, 11097-11103, 1987
A;Title: Human apolipoprotein B-100 heparin-binding sites.
A;Reference number: A92605; MUID:87280197; PMID:3301850
A;Contents: annotation; heparin binding and disulfide bond
R;Dashti, N.; Lee, D. M.; Mok, T.
Biochem. Biophys. Res. Commun. 137, 493-499, 1986
A;Title: Apolipoprotein B is a calcium binding protein.
A;Reference number: A90125; MUID:86242245; PMID:3087360
A;Contents: annotation; calcium binding
R;Carlsson, P.; Olofsson, S.O.; Bondjers, G.; Darnfors, C.; Wiklund, O.; Bjursell, G.
Nucleic Acida Res. 13, 8813-8826. 1985
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A;Reference number: A60950; MUID:90324804; PMID:2373961 A;Accession: A60950
                                                                                                                                                                apolipoprotein
C;Species Cala
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A;Residues: 1-274 <LAW>
A;Cross-references: UNIPROT:Q7M2U9
A;Cross-references: UNIPROT:Q7M2U9
A;Note: authors translated the codon GAT for residue 155
C;Superfamily: apolipoprotein B
C;Keywords: atherosclerosis; calcium; cholesterol metabol
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A; Title: A cross-species comparison of the A; Reference number: A60950; MUID:90324804; A; Accession: E60950
                                                                                                                apolipoprotein B-100 - chicken (fragment)
c;Species: Gallus gallus (chicken)
C;Date: 31-Dec-1993 #sequence_revision 31-Dec-1993
C;Accession: E60950
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                                                                   R;Law, A.; Scott, J.
J. Lipid Res. 31, 1109-1120, 1990
                                                                                                                                                                                                                    E60950
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J. Lipid Res. 31, 1109-1120, 1990
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Best Local
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8; Conserv
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Pred. No. 3.3;
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                      apolipoprotein PMID:2373961
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hypothetical protein alr0547 [imported] - Nostoc sp. (strain PCC 7120)
C;Species: Nostoc sp. PCC 7120
A;Note: Nostoc sp. strain PCC 7120 is a synonym of Anabaena sp. strain PCC 7120
C;Date: 14-Dec-2001 #sequence_revision 14-Dec-2001 #text_change 09-Uul-2004
C;Accession: AB1875
R;Kaneko, T.; Nakamura, Y.; Wolk, C.P.; Kuritz, T.; Sasamoto, S.; Watanabe, A.; Iriguchi Nakazaki, N.; Shimpo, S.; Sugimoto, M.; Takazawa, M.; Yamada, M.; Yasuda, M.; Tabata, S., Title: Complete Genomic Sequence of the Filamentous Nitrogen-fixing Cyanobacterium Ana A;Reference number: AB1807; MUID:21595285; PMID:11759840
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C;Keywords: atherosclerosis; calcium; cholesterol metabolism; chylomicron; glycoprotein;
F;435-445-Region: receptor binding
F;646-656/Region: receptor binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A;Title: A cross-species comparison of the A;Reference number: A60950; MUID:90324804; A;Accession: D60950 A;Molecule type: mRNA A;Residues: 427-531,'S',533-700 <LAW>
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Gene 87, 309-310, 1990
A;Title: Sequence of the putative low-density lipoprotein receptor-binding regions of A;Reference number: JH0101; MUID:90236327; PMID:2332175
A;Accession: JH0101
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J. Lipid Res. 31, 1109-1120, 1990
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A;Residues: 1-531,'S',533-784 <SM2>
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R;Smith, T: Hautamaa, D.; Maeda, N.
submitted to the EMBL Data Library, May 1989
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A;Accession: S33128
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(;Date: 17-Apr-1993 #sequence revision 17-Apr-1993 #text_change 09-Jul-2004
C;Accession: JH0101; S33128; D60950
R;Smith, T.J.; Hautamaa, D.; Maeda, N.
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Best Local :
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C;Superfamily: apolipoprotein B
C;Keywords: atherosclerosis; calcium; cholesterol metabolism; chylomicron;
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A; Residues: 1-275 < LA
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Pred. No.
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A;Reference number: S34190
A;Accession: S34191
A;Molecule type: DNA
A;Residues: 1-561 - HAV
A;Cross-references: EMBL: Z23169
C;Superfamily: sulfite reductase
C;Keywords: 4Fe-45; chromoprotein; cysteine biosy; F;433,439,448,472/Binding site: 4Fe-45 cluster (C)
F;472/Binding site: siroheme iron (Cys) (axial li
                                                                                                                                                                                                                                                                        C; Date: 10-Sep-1999 #sequence_revision 10-Sep-1999 #text_change C; Accession: S34191  
R; Haverkamp, T.; Gisselmann, G.; Schwenn, J.D. submitted to the EMBL Data Library, July 1993  
A; Description: Structure and function of genes involved in the m
                                                                                                                                                                                                                                                                                                                                                                                                                            sulfite reductase (NADPH2) (EC 1.8.1.2) hemoprotein - Thiocapsa roseopersicina
C;Species: Thiocapsa roseopersicina
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R;White, O; Eisen, J.A.; Heidelberg, J.F.; Hickey, E.K.; Peterson, J.D.; Dodson, M.; Shen, M.; Vamathevan, J.J.; Lam, P.; McDonald, L.; Utterback, T.; Zalewski, S.; Smith, H.O.; Venter, J.C.; Fraser, C.M.
Science 286, 1571-1577, 1999
A;Title: Genome sequence of the radioresistant bacterium Deinococcus radiodurans A;Title: and A;Title: A;Tit
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A;Residues:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A; Molecule type: DNA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 9
A75334
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Best Local
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A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-680 <KUR>
A;Cross-references: UNIPROT:Q8YZD0; GB:BA000019;
A;Experimental source: strain PCC 7120
C;Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Status: preliminary
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Pred. No. 16;
2; Mismatches
biosynthesis; heme;
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ial ligand) #status p
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T.; Zalewski,
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A; Residues: 1-112 < FUR>
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A;Title: Dense cluster of genes is located at the ecdysone-regulated 3C A;Reference number: S33822; MUID:93287124; PMID:8510164
A;Accession: S33822
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    salivary glue protein ng-2 - fruit fly (Drosophila melanogaster)
C;Species: Drosophila melanogaster
C;Date: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change
C;Accession: S33822
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C;Keywords: salivary gland; tandem repeat
F;1-20/Domain: signal sequence #status predicted <SIG>
F;21-107/Product: salivary glue protein homolog #status predicted
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A;Title: A new gene nested within the dunce genetic unit of Drosophila melanogaster. A;Reference number: S12607, MUID:91016924; PMID:2120680
A;Accession: S12607
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A;Cross-references: FlyBase:FBgn0002933
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A; Residues: 1-107 < FUR>
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C;Accession: S12607
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C;Species: Drosophila melanogaster
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Best Local
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Similarity 55.6%;
5; Conservation
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5; Conservation
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                                                                                                                                            KITRRRGLR 98
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87.5%;
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Pred. No. 20;
4; Mismatches
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Pred. No.
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Pred. No.
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54;
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A;Authors: Parry, C.; Quail, M.; Rutherford, K.; Simmonds, M.; A;Title: Complete genome sequence of a multiple drug resistant A;Reference number: AB0502; MUID:21534947; PMID:11677608
                                                                                                , S.; Moule, S.; O'Gaora,
Nature 413, 848-852, 2001
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N.R.; Pickard, I

J.; Churcher, e, N.; Farrar,

18-Nov-2002 D.; Wain, J, L.; White,

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Pleischmann, R.D.; Quackenbush, J.F.; White, O.; Nelson, K.E.; Ketchum, K.A.; Dod. Glodek, A.; Zhou, L.; Overbeek, R.; Gocayne, J.D.; Weidman, J.F.; McDonald, L. Nature 390, 364-370, 1997

Nature 390, 364-370, 1997

A;Authors: Utterback, T.; Cotton, M.D.; Spriggs, T.; Artiach, P.; Kaine, B.P.; Sykes, A;Authors: Utterback, T.; Cotton, M.D.; Spriggs, T.; Artiach, P.; Kaine, B.P.; Sykes, A;Title: The complete genome sequence of the hyperthermophilic, sulfate-reducing archa A;Reference number: A69250; MUID:98049343; PMID:9389475
A;Accession: B69407
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      hypothetical protein SPCC645.12c - fission yeast (Schizosaccharomyces pombe) C;Species: Schizosaccharomyces pombe C;Date: 03-Dec-1999 #sequence_revision 03-Dec-1999 #text_change 09-Jul-2004 C;Accession: T41529
                                                                                                                                                                                                                                                                    A; Molecule type: DNA
A; Residues: 1-259 < KLE>
                                                                                                                                                                                                                                                                                                               A;Status: preliminary; nucleic acid sequence not shown; translation
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A;Accession: AH0906
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A;Residues: 1-309 < PAR>
A;Cross-references: GB:AL513382; PIDN:CAD07846.1; PID:g16504394; GSPDB:GN00176
C;Genetics:
A;Gene: STY3508
C;Superfamily: Methanococcus jannaschii conserved hypothetical protein MJ0486
C;Superfamily: Methanococcus jannaschii conserved hypothetical protein MJ0486
Duery Match
Best Local Similarity 66.7%; Score 33; DB 2; Length 309;
Best Local Similarity 66.7%; Pred. NO. 51;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
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SEQUENCE FROM N.A.

MEDIJINE-22761261; PubMed=12878460;

Amrine-Madsen H., Koepfli K.-P., Wayne R.K., S

"A new phylogenetic marker, apolipoprotein B,

evidence for eutherian relationships ";

Mol. Phylogenet. Evol. 28:225-240(2003).

EMBL; AF548435; AAP97391.1;
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Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Chiroptera; Megachiroptera; Pteropodidae;
Pteropodinae; Nyctimene.
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01-OCT-2003 (TrEMBLrel. 25,
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Name=apoB-100;
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MEDLINE=22761261; PubMed=12878460;

Amrrine-Madsen H., Koepfli K.-P., Wayne R.K., (
"A new phylogenetic marker, apolipoprotein B,

evidence for eutherian relationships.";

MOJ. Phylogenet. Evol. 28:225-240(2003).

EMBL; AY243375; AAP50763.1; -
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EMBL; AY243379; AAP50767.1;
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421 AA;
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46747 MW;
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Pred. No. 1.4;
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                                                     SEQUENCE FROM N.A.

MEDILINE-22761261; PubMed=12878460;
Amrrine-Madsen H., Koepffli K.-P., Wayne R.K., §
"A new phylogenetic marker, apolipoprotein B,
evidence for eutherian relationships.",
Mol. Phylogenet. Evol. 28:225-240(2003).
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Q7YQM7;
01-OCT-2003
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Chiroptera; Megachiroptera; Pteropodidae;
Pteropodinae; Pteropus.
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Name=apoB-100;
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ein B 100 (Fragment).
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Chaetophractus villosus (South American armadillo).
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Apolipoprotein B (Fragment).
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Hystricognathi; Brethizontidae;
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Hystricognathi; Hydrochaeridae;
                                                                                                                 "A new phylogenetic marker, apolipoprotein evidence for eutherian relationships."; mol. Phylogenet. Evol. 28:225-240(2003).
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Amrine-Madsen H., Koeptli K.-P., Wayne R.K., 'Amrine-Madsen H., Koeptli K.-P., Wayne R.K., 'Parker' and 'Parker' apoliopprotein B, 'Anew phylogenetic marker, apoliopprotein B, evidence for eutherian relationships.";
evidence for eutherian relationships.";
Mol. Phylogenet. Evol. 28:225-240(2003).
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            Score 44; DB 2;
Pred. No. 1.5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 44;
Pred. No.
                                                                                                                                                                                                                                                                                                                                            PRT;
                                                   9572FE5F5E7625F2 CRC64;
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  Mismatches
                                                                                                                                        0;
, Wayne R.K., s;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 2;
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, provides compelling
                                                                                                                                                         Springer M.S.;
  0
                                                                                                                                           provides
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                        Length 445;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 445;
  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
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                                                                                                                                            compelling
 0
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RLTRKRGLK

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RESULT 12
Q60536
ID Q60531
AC Q60531
DT Q1-NO'
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Q28473
Q28473
Q28477
DT 01-NO
DT 01-NO
DT 01-NO
DT 01-Waran
OC Eukar
OC Mamma OC Cerco
OX MCBI
RN [1]
RN [1]
RY MEDLI
RX MEDLI
RY MEDLI
R
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Best Local S
Matches 9
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                                            SEQUENCE FROM N.A.

MEDLINE=90236327; PubMed=2332175;

Smith T.J., Hautamaa D., Maeda N.;

"Sequence of the putative low-density lipoprotein regions of applipoprotein B in mouse and hamster."

Gene 87:309-310(1990).

EMBL; M35187; AAA37059.1; -.
                             PIR; C60950;
PIR; JH0102;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Q60536;
01-NOV-1996
01-NOV-1996
01-OCT-2003
                                                                                                                                                                                                                                                                                                                                                                                                        Hamster apolipoprotein (apoB) (Fragme
Mesocricetus auratus (Golden hamster)
Eukaryota; Metazoa; Chordata; Craniat
Mammalia; Eutheria; Rodentia; Sciurog
                                                                                                                                                                                                                                                                                                                                                            NCBI_TaxID=10036;
                                                                                                                                                                                                                                                                                                                                                                                                 Mesocricetus
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NON_TER
NON_TER 5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Submitted (FEB-1992) to the EMBL; X15737; CAA33755.1; PIR; S32802; S32802.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WEDLINE-92075708; PubMed=1742325; Pape M.E., Castle C.K., Murray R.W., Funk G. Marotti K.R., Melchior G.W.; "Apo B metabolism in the cynomolgus monkey: transcriptional regulation.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TISSUE=Liver;
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Q28473
Q28473;
Q1-NOV-1996 (TrEMBLrel. 01, Created)
Q1-NOV-1996 (TrEMBLrel. 01, Last sequence update)
Q1-VUN-2003 (TrEMBLrel. 24, Last annotation update)
Apolipoprotein B (Fragment).
Macaca fascicularis (Crab eating macaque) (Cynomolgus monkey).
Markaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Cercopithecinae;
MCBI TaxID-9541;
Macaca.
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TISSUE=Liver;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       227
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Similarity 100.0%;
9; Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             289
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                         C60950.
JH0102.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (TrEMBLrel. 01, Created)
(TrEMBLrel. 01, Last sequence update)
(TrEMBLrel. 25, Last annotation update)
(Tremblic (apob) (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         596
596 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RLTRKRGLK 297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1
596
; 66757 MW;
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1; -.
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                                                                                                                                                                                                                                                                                                                                                                                             Craniata; Vertebrata; Euteleostomi;
Sciurognathi; Muridae; Cricetinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EMBL/GenBank/DDBJ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 44; DB;
Pred. No. 2.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               B13BBA74E25C3120 CRC64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        780
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                                                                                                                                    hamster.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
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                                                                                                                                                      receptor-binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
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RESULT 14
Q1378
ID 782
ID 782
AC Q1378
AC Q1378
DT 01-NO
DT 01-NO
DT 01-JU
DE APOB
GN Name=
OS Homo
OC Bukar
OC Mamma
OX NCBI-
RW [1]-
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Q60537
ID Q66
AC Q6
DT 01
DT 01
DT 01
DT 01
DE App
OS Me
OC Ma
OC Ma
OC Me
OC
P SEQUENCE FROM N.A.

X MEDIANE=87191999; PubMed=2883086;
A Carlsson P., Darnfors C., Olofsson S.O., Bjursell G.;
T "Analysis of the human apolipoprotein B gene; complet
I the B-74 region.";
L Gene 49:29-51 (1986).
EMBL; M15421; AAA51758.1; -.
R PIR; A27850; LPHUB.
R GO; GO:0005576; C:extracellular; NAS.
R GO; GO:0005379; F:lipid transporter activity; NAS.
R GO; GO:0006869; P:lipid transport; NAS.
NON_TER
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Best Local S
Matches 9
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Best Local S
Matches 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Q13788;
Q13788;
Q1-NOV-1996
Q1-NOV-1996
Q1-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens (Human).
Eukaryota; Metazoa; C
Mammalia; Eutheria; F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APOB protein
Name=APOB;
                                                                                                                                                                                                                                                                                                                                                                           NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Lipoprotein.
NON_TER
NON_TER 78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Smith T., Hautamaa D., Mae
Submitted (MAY-1989) to th
EMBL; X15192; CAA33266.1;
PIR; C60950; C60950.
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Q60537;
Q1-NOV-1996
Q1-NOV-1996
Q1-OCT-2003
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Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ol-NOV-1996 (TrEMBLrel. 01, Created)
01-NOV-1996 (TrEMBLrel. 01, Last sequer
01-OCT-2003 (TrEMBLrel. 25, Last annota
Apolipoprotein B (Fragment)
Mesocricetus auratus (Golden hamster)
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NON_TER
SEQUENCE
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Similarity 100.0%; Pred. No. 2.7;
9; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1
780
780 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (Fragment)
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780 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                    Chordata;
Primates;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        780
86904 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1
780
; 86625 MW;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Last sequence update)
Last annotation updat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                                                  Craniata; Vertebrata; Euteleostomi; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 44;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sciurognathi;
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Sciurognathi; Muridae; Cricetinae;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
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annotation updat
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"Human liver apolipoprotein B-100 cDNA:
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"Human liver apolipoprotein B
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"The complete cDNA and amino
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MEDLINE=87016385; PubMed=3763409;
MEDLINE=87016385; PubMed=3763409;
Knott T.C., Wallie S.C., Powell L.M., Pease R.J., Lusis A.J.,
Blackhart B., McCarthy B.J., Mahley R.W., Levy-Wilson B., Scott
"Complete cDNA and derived protein sequence of human apolipoprot
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Eukaryota; Metazoa;
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MEDLINE=88003974; P
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MEDLINE=87161758;
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Law S.W., Grant S.M., Higuchi K., Hospattankar A.V.,
Lee N., Brewer H.B. Jr.;
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                                                                              OF 709-906 FROM N.A.
185270450; PubMed=3860836;
Notulsky A.G., Albers J.J.;
Ial CDNA Clone for human apolipoprotein B
atl. Acad. Sci. U.S.A. 82:4983-4986(1985)
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Hadzopoulou-Cladaras
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PubMed=3903660;
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MEDLINE-88018019; PubMed=3659919; Chen S.-H., Habib G., Yang C.-H., Gu Siberman S.R., Cai S.-J., Deslypere Gotto A.M. Jr., Li W.-H., Chan L.; "Apolipoprotein B-48 is the product ospecific in-frame stop codon."; Science 238:363-366(1987).
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Protter A.A., Hardman D.A., Schilling J.W.,
Chen G.C., Kirsher S.W., McEnroe G., Kane J.
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KMOCT T.C., Pease R.J., Powell L.M., Wallis
Innerarity T.L., Blackhart B., Taylor W.R.,
Johnson D., Fuller M., Lusis A.J., McCarthy
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MEDLINE=88018019;
Chen S.-H., Habib
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137:493-499(1986)
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"Detection of new variants in the a
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MEDLINE=97044521;
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Soria L.F., Ludwig E.H., Clarke H.R.G., Vega G.L.,
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MEDLINE=91071750; PubMed=1979313;
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                                                                FUNCTION: Apolipoprotein B is a major protein constituent of chylomicrons (apo B-48), LDL (apo B-100) and VLDL (apo B-100). Ap B-100 functions as a recognition signal for the cellular binding and internalization of LDL particles by the apoB/E receptor. SUBCELLULAR LOCATION: Secreted.
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